



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

Response to Public Comments on Draft Regulations: Building Capacity for Managing Organic Materials

-
- 310 CMR 16.00: Site Assignment for Solid Waste Management Facilities
 - 310 CMR 19.000: Solid Waste Management Facility Regulations
 - 314 CMR 12.00: Operation, Maintenance, and Pre-Treatment Standards (Wastewater)
-

November 23, 2012

Contents

Introduction	3
General Comments	6
General Comments of Agreement and Support	6
General Comments of Issue or Concern	7
Section Specific Comments.....	18
310 CMR 16.01 – General Purpose	18
310 CMR 16.02 – Definitions	22
310 CMR 16.03 – Exemptions from Site Assignment	29
310 CMR 16.04 – General Permit for Recycling, Composting or Aerobic and Anaerobic Digestion Operations	34
310 CMR 16.05 – Permits for Recycling, Composting or Conversion (RCC) Operations.....	49
310 CMR 16.06 - General Requirements for General Permits and Recycling, Composting and Conversion Permits	62
310 CMR 19.000 - General Comments.....	64
310 CMR 19.006 – Definitions	65
314 CMR 12.00.....	66
Appendix	69
Submitters of Comments on the Draft Organics Diversion Regulations.....	69

Introduction

In November 2011, the Massachusetts Department of Environmental Protection (MassDEP) published draft amendments to the regulations governing site assignment of solid waste management facilities (310 CMR 16.00) and the regulations governing operation, maintenance and pre-treatment standards for wastewater treatment works and indirect dischargers (314 CMR 12.00). These amendments were developed to address barriers that the current regulations pose to the development of certain types of recycling, composting, and other clean/green cutting edge technologies in the Commonwealth, such as anaerobic digestion (AD), a technology that turns organics waste into natural gas for energy.

The proposed regulatory changes were designed to bring the regulations up to date with these innovative technologies by establishing a clear permit pathway for these activities, facilitating siting of these projects, and ensuring that high environmental standards are met. The current regulations, last amended in the 1990s, were primarily designed to address the issues surrounding the handling and disposal of solid waste. That was a “one size fits all” approach where all types of “wastes” were primarily being discarded in landfills or combusted at solid waste incinerators. Site assignments, which are granted by local boards of health (BOH), were (and will continue to be), required for most solid waste management facilities, including landfills, transfer stations, waste processing facilities and combustion facilities.

In the last twenty years, great strides have been made by diverting specific materials from the waste stream to recycling, composting, recovery or other reuse, instead of disposal. The existing site assignment regulation (310 CMR 16.00) exempts many types of operations and activities from site assignment because they use material that has been separated from waste (“pre-sorted”) as feedstocks for recycling, manufacturing and composting and are, therefore, not solid waste disposal or treatment facilities. In addition, 310 CMR 16.00 currently allows certain recycling and composting operations to proceed without a site assignment, if they obtain a determination (called a Determination of Need or DON) from MassDEP. However, the DON process has limited applicability, and many of the current proposals for new technologies do not fit within its framework. Many new and innovative technologies that make productive use of diverted material are more like industrial operations than traditional waste management activities. They often are completely enclosed and thus present low risks of nuisances (e.g., odors and vectors) and other issues associated with solid waste facilities. These amendments will encourage the recycling, composting, and reuse of an expanded range of materials, and the conversion of organic materials into clean and renewable energy, while maintaining appropriate MassDEP oversight over these activities.

Two of the Patrick Administration’s policy objectives are driving these changes: 1) diversion of recyclable and organic material from the solid waste stream as mandated by the Massachusetts Solid Waste Master Plan; and 2) generation of clean renewable energy that will help achieve the goals of the Massachusetts Clean Energy and Climate Plan for 2020.

The final amendments to 310 CMR 16.00, and companion amendments to 310 CMR 19.000, would amend those regulations to:

- Exempt from site assignment operations handling organic or recyclable materials that have been separated from waste and that recycle, compost or convert these materials into new products or energy, because they would not be managing “solid waste;”
- Establish clear and streamlined permitting pathways for these operations (please note that a future companion regulation will propose timelines to expedite permit reviews and associated fees);
- Establish levels of MassDEP review and oversight for these operations that are commensurate with the environmental and public health issues that they present, including:
 - conditional exemptions for operations and activities that do not warrant MassDEP oversight;
 - general permits by regulation for composting, recycling and digestion/conversion operations that are small in size and risk; and
 - individual permit reviews for large recycling, composting and digestion/conversion operation that warrant greater MassDEP oversight, but on an expedited schedule;
- Clarify that composting and other organics management activities on Massachusetts farms that are regulated by the Massachusetts Department of Agricultural Resources (MA DAR) would not be regulated by MassDEP; and
- Revise definitions in 310 CMR 19.000 for consistency with the amendments to 310 CMR 16.00.

The package also includes amendments to 314 CMR 12.00 to allow Publicly Owned Treatment Works (POTWs) that use anaerobic digesters to accept source-separated organic material generated at other sites. The amendments to 314 CMR 12.00 provide additional opportunities to capture the value of food and other organic material. These amendments may also allow the POTW’s anaerobic digesters to operate more efficiently, increase the quantities of biogas that these units produce to generate energy, and reduce wastes from the operations.

During the public comment period on these proposals (November 15, 2011 through January 23, 2012), MassDEP received many helpful and thoughtful comments. Stakeholders expressed broad support for the intent of these regulations, but also raised a number of specific concerns. MassDEP has carefully considered these comments and addressed them by revising the amendments in a number of ways. This document contains MassDEP’s responses to the comments received. Major changes that have been made in the final rule are summarized below:

1. Clarified definitions to more clearly specify that:
 - “Composting” does not include “conversion” of organic materials into energy, and
 - “Recyclable” material does not include organic material but includes paper.
2. Re-named the proposed “permit by rule” operations (which do not need a site-specific Recycling, Composting, or Conversion (RCC) permit from MassDEP) to “general permit” operations to avoid confusion. There was confusion about the less well known term, “permit by rule.”
3. Clarified the boundaries between recycling, composting and conversion activities that can operate under general permits and RCC Permits.

4. Clarified the applicability of the new rules for MassDEP oversight of RCC operations to activities located on property that has received a site assignment from a local BOH, as long as those activities are allowed by the terms of the site assignment:
 - Depending on the size and materials handled, operations that qualify for a general permit can proceed under 310 CMR 16.04.
 - Operations that require an RCC permit under 130 CMR 16.05 need to obtain this permit before starting construction or operation.
 - If the site assignment prohibits the operation of the new facility, the proponent needs to obtain a site assignment modification from the BOH.
5. Revised maximum size limits for specific general permit operations:
 - The limit for a composting operation was lowered from 30 tons per day (tpd) to 15 tpd to reduce the potential for nuisance conditions, such as odors; and
 - The limit for an aerobic or anaerobic digestion operation was raised from 60 tpd to 100 tpd and clarified to specify that this limit applies to the total amount of material that the operation handles, not just what can be brought in from off-site.
6. Combined the former “Leaf and Yard Waste Composting Operation” and “General Composting Operation” into one “Composting Operation” category under general permits with the same requirements (although a municipality can limit the material that a specific composting operation can accept to leaf and yard waste only).
7. Clarified that “general permit” operations must notify MassDEP and the local BOH at least 30 days before starting to operate.
8. Clarified the criteria that MassDEP will use to determine whether to grant an RCC Permit under 310 CMR 16.05.
9. Established a requirement that applicants for an RCC permit under 310 CMR 16.05 must meet with MassDEP staff before submitting their application, to ensure that all necessary information and documentation will be included with the permit application.
10. Clarified that the allowable limits on residue that an operation can generate are measured by weight (the proposed rule allowed measurements by weight or volume).
11. Tightened the requirements for facilities to ensure that they have plans in place to control nuisances (odors, dust, etc.) and vectors, and also have contingency plans for dealing with problems that may arise with their odor and vector control plans (e.g., what will happen if the odor controls malfunction).
12. Tightened requirements for source control (also referred to as input control) as the primary means of preventing toxics or other contamination from ending up in the products produced during composting or conversion of organic material. Source control encompasses the principals of limiting the types of material used and having knowledge of how the materials are generated or are otherwise handled prior to receipt. The final regulation also establishes a requirement that operations working under a general permit have a plan for controlling toxics that are found in the operation’s products at levels that would pose a risk to public health, safety, or the environment. MassDEP will review plans for input material at operations that require an individual RCC permit, and may establish specific input control measures that are designed to address the potential for toxics in incoming organic materials.
13. Removed definition of “Speculative Accumulation” with a default time limit and instead added a specific time limitation for each type of material. For example, the final rule allows compostable

material to be at an RCC operation for up to one year. This should allow for seasonal distribution of products (e.g., soil amendments) as well as hiccups in markets.

14. The final rule allows municipalities to request a public hearing on a draft RCC permit and to request an adjudicatory hearing on a final permit decision.
15. Clarified transition provisions for operations currently holding MassDEP DONs or that are currently operating under a conditional exemption.
16. Expanded the description of provisions for MassDEP's access to locations operating under 310 CMR 16.00.
17. Reorganized the statements of requirements for conditional exemptions (310 CMR 16.03), general permits (310 CMR 16.04), and RCC permits (310 CMR 16.05), for clarity.

The public comments received during the public comment period are summarized and organized by topic and section of the regulations. A list of commenters can be found in the Appendix to this document.

General Comments

General Comments of Agreement and Support

- Many commenters noted that enabling infrastructure that encourages individual and institutional reuse of organic material will not only produce valuable outputs – such as clean energy and compost – but also provides the necessary inputs to support local food systems.
- MassDEP received a number of comments commending it for the transformative proposed rule to 310 CMR 16.00 in so far as it rationalizes and updates the sections of the rule that define which projects need site assignment and solid waste permitting. The proposed rule creates a streamlined permit by rule-like process, establishes a new permitting process for larger projects, and makes clear there is a permitting path for aerobic and anaerobic digestion facilities that does not involve site assignment.
- Farm Organizations commented that they support the proposed replacement of 310 CMR 16.05 with 310 CMR 16.03, 16.04, & 16.06 and the revised definitions in 310 CMR 19.006. In particular, support was noted for:
 - 310 CMR 16.03(3)(a)11: Activities Located at an Agricultural Unit;
 - 310 CMR 16.04(2)(b)1-8: Specific Performance Standards for Composting Organic Materials; and
 - 310 CMR 19.006: Revised definitions for “Agricultural Material,” “Compostable Material,” “Composting or Composted,” and “Pre-Sort.”
- Others supported MassDEP's effort to attain waste reduction goals established in the draft Solid Waste Master Plan by amending the regulations to provide incentives for diversion of organic materials from the solid waste stream. Groups agreed that development of infrastructure is key to increasing recycling, reuse, and reduction. Specific support was noted for the proposed amendments to 310 CMR 16.00, 310 CMR 19.00 and 314 CMR 12.00.
- Given the State's projected decline in landfill capacity over the next few years, waste haulers supported the proposed phase-in of the disposal ban on organics, as well as MassDEP's efforts to develop a regulatory framework that encourages the development of sensible organic waste management options.

General Comments of Issue or Concern

- **Exempting RCC operations from Site Assignment by local Boards of Health (BOHs)**

Comment: The draft regulations are intended to streamline permitting for organic waste processing facilities. Unfortunately, this is accomplished by eliminating local BOH permitting authority. This is in direct conflict with the local BOH authority to issue site assignment.

Comment: The proposed regulations do not require a site assignment even for large organics processing facilities. A site assignment should be required for large facilities processing putrescible material. All anaerobic digesters processing food or other putrescible material with a capacity of 300 tons per day or larger should be site assigned, even if located on farms. These facilities should be sited under the same General Site Suitability Criteria as a solid waste facility.

Response: G.L. c. 111, §§ 150A and 150A1/2 grant DEP broad authority over setting criteria for which solid waste facilities and operations require site assignments and solid waste facility permits, and which do not. Pursuant to this authority, DEP has enacted regulations to exempt activities from solid waste site assignment and solid waste facility permits in 310 CMR 16.00. The amendments to 310 CMR 16.00 expand the existing exemptions from site assignment that have successfully facilitated the development of recycling and composting operations and have encouraged industries to incorporate material diverted from solid waste into their manufactured products since 1990.

MassDEP has determined that pre-sorted recyclables and source separated organic materials are not solid waste. Therefore, operations that utilize these materials are not solid waste facilities provided the recyclables and organic materials are handled in accordance with the requirements established in the amended regulations and with conditions accompanying an RCC permit.

MassDEP believes that these operations are more properly classified as “light or medium industrial activities”, and that they should be regulated as such by state and local authorities. If properly designed and operated, the impacts from these operations on their neighbors should be minimal, similar to other types of light and medium industrial operations. MassDEP believes that the site assignment statutes (M.G.L. c. 111, §150A and §150A 1/2) were intended and designed to address the potential public health and nuisance conditions associated with dumps, trash incinerators, and landfills, which have far more potential to affect the environment than modern industrial operations (including those that handle recyclable or organic materials). Since MassDEP has determined that RCC operations are not solid waste management facilities, site assignment is not applicable to large or small operations. Therefore, MassDEP is maintaining the exemptions from site assignment for these operations and making this clearer by amending 310 CMR 16.21, which addresses alternative uses of assigned sites. However, a site assignment for an existing solid waste management facility with language that prevents an RCC operation from operating consistently with the site assignment would need to be modified before the RCC operation could occur. MassDEP lacks authority to change such site assignments on its own.

- **Revisions will remove review/oversight from the local community**

Comment: Selectmen commented that they practice full and complete transparency with their residents and expect the same of the State Government. Consequently, any modification of the regulations that has the effect of removing review and oversight from the local community is unacceptable.

Response: All applicable local requirements for zoning, site plan approval and building permits, will continue to apply to operations that are exempted from site assignment under 310 CMR 16.00, and, therefore, the local community will be able to regulate such matters as hours of operation, traffic and setbacks. In addition, revisions have been made in the final 310 CMR 16.00 to provide a more extensive and transparent public review and comment process for larger operations. This process will apply to individual RCC permits. The process will include an opportunity for the public to comment on draft permits and the ability of the host municipality to request a public hearing on the draft MassDEP permit. In addition, groups of ten citizens and the host municipality will have the right to request an adjudicatory hearing on the terms of any final MassDEP permit.

Comment: What protections (ranging from specific limits on noise/odor/hours of operation/traffic to setbacks) will be provided residents and other businesses? What role will the Town, through its Board of Health, Planning Board, Conservation Commission and Zoning Board of Appeals play in the permitting process?

Response: The amendments will set stringent requirements for all RCC operations through regulation or through individual MassDEP permits. These standards will include a requirement that no nuisance conditions, including odors, vectors and noise issues, be caused by the operation. The standards will be enforceable by MassDEP. In addition, this regulation does not change a municipality's authority to regulate development and to establish conditions for hours of operation, traffic and setbacks from other properties through zoning, subdivision, and other municipal regulations. These amendments will also not affect the authority of the local BOH to issue orders or take other enforcement with respect to any nuisance conditions that arise from an RCC operation or the jurisdiction of Conservation Commissions to condition development in areas regulated by the Wetlands Protection Act.

- **On-going role for Boards of Health**

Comment: Past exemptions from the requirement for site assignment have dealt with relatively inert materials or with organic materials such as yard wastes, which presented little or no potential for "noisome and injurious odors," and therefore did not put MassDEP in conflict with MGLc.111, s.143. The proposed regulations, as they relate to organic wastes, in particular food wastes, appear to create such a conflict. Unless these issues are explicitly addressed, the proposed regulation changes will not provide the public with assurance that food waste "conversion" facilities will be adequately regulated. This is essential to gaining public acceptance, which also is essential to establishing an environment where such facilities are likely to be built.

Response: These amendments are not in conflict with the Noisome Trade statute, M.G.L. c. 111, § 143. The Noisome Trade law was created to deal with extreme odor and nuisance conditions from piggeries and slaughterhouses. The composting and aerobic/anaerobic digestion operations that will be allowed under the amendments are industrial types of operations with modern technologies that can control odors, vectors and other potentials for nuisance. These operations are dissimilar from the piggeries and other activities targeted by the Noisome Trade law and can be successfully regulated without a site assignment under either the Solid Waste or Noisome Trade statutes. The amendments will establish stringent requirements and require best management practices to prevent nuisance conditions that are enforceable by MassDEP.

In addition, MassDEP has had years of experience in regulating the use of organic putrescible materials at composting operations throughout the Commonwealth (these operations have been exempt from site assignment for many years). For example, the following activities that handle material that can become putrescible have been exempted from site assignment for many years.

- Exempt leaf composting operations have accepted up to 25% of their incoming material in the form of grass clippings, which is a putrescible material; and
- Exempt composting operations located at industrial, commercial, or institutional sites or at zoos can handle up to four cubic yards or two tons per week of vegetative or food material or animal manure (all of these are putrescible) generated at the site.

In addition, larger composting operations that handle up to 40 cubic yards/20 tons of vegetative material per day or up to 20 tpd of food material have been allowed to operate under a MassDEP DON, which is a determination that they do not require a site assignment as long as they comply with specific conditions of the approval.

The conditions that MassDEP has established for DON approvals were used as the basis for the permit conditions that will be required for facilities needing a RCC permit under the new regulation. In addition, the final regulation sets limits on the size of composting and conversion operations that can accept putrescible materials under a general permit and requires an individual RCC permit for larger operations that present greater risks of nuisance conditions. Individualized permit conditions can be established for these larger facilities to prevent nuisances.

Comment: Does MassDEP want facilities with a conditional exemption or permit to be subject to 310 CMR 16.00 or to M.G.L. c.111, s. 143? NSWMA (Solid Waste Trade Associations) support facility exemption from site assignment requirements; and we support site assignment under Sec. 150A or conditional exemption under 310 CMR 16.00 and not site assignment under M.G.L. c. 111, sec. 143.

Response: Operations that qualify as RCC operations under 310 CMR 16.00 are exempt from local “solid waste” site assignment under M.G.L. c. 111, §150A and §150 ½. However, M.G.L. c. 111, §143 gives local BOHs the authority to determine whether an activity should be subject to a “noisome trade” site assignment issued pursuant to that statute. However, as noted above, MassDEP views RCC operations as more like modern industrial activities, rather than the piggeries and other activities that the Noisome Trade statute was designed to address. MassDEP believes that the amendments in conjunction with local land use controls (e.g., zoning approvals) will provide an adequate regulatory structure for RCC operations and that municipal site assignment will not be required.

Comment: Though the Boston Public Health Commission (BPHC) generally supports the proposed amendments, we are concerned that some of the proposed changes create a potential for coordination challenges and possible preemption of local BOH authority, specifically the BPHC’s Waste Container Lot, Junkyard and Recycling Facilities Regulation. If composting facilities were to be deemed preempted from local permitting requirements, local boards of health like the BPHC would be relegated to only an advisory role. The BPHC enacted its Waste Container Lot, Junk Yard, and Recycling Facilities Regulation on December 17, 1998 to address those operations whose facilities are exempt from site assignment by MassDEP. The regulation is triggered where

MassDEP regulations are not, i.e. when a site assignment is not required and no MassDEP permit is required. Through the BPHC's Regulations, the number of facilities has been reduced from 90 to 14. Among these 14 businesses are small junkyard facilities that were able to complete the BPHC permitting process, but would probably have been unable to complete a difficult process such as that for site assignment. MassDEP is proposing to change the existing regulatory order by requiring a state permit to operate a composting facility; facilities that are usually exempt from site assignment. This change would create a new dynamic where composting facilities would require both a MassDEP permit and, in Boston, a BOH permit. Requiring both a state and a local permit for the same operation raises potential coordination challenges and possible claims of preemption. BPHC supports the MassDEP amendments, but would like the following two provisions to be clear within these amendments:

- **Access:** The owner or operator of any operation which qualifies for a permit pursuant to 16.04 or 16.05 shall allow the BOH and Department access to enter upon and inspect the site, the operation and relevant operating records to determine and compel compliance with applicable regulations and conditions of any permit.
- **Non-preemption:** Nothing herein shall be construed to prohibit board of health regulation of waste facilities pursuant to MGL c.111.

Response: MassDEP does not have authority to grant BOHs access to operations that MassDEP regulates. Similarly, MassDEP cannot confer authority on BOHs to enforce MassDEP's requirements and other conditions. BOHs need to rely on their own statutory authority, which allows them to respond to nuisance conditions. BOHs have authority to conduct inspections relating to nuisances and to issue enforcement pursuant to G.L. c.111, §§ 122, 123, 124 and 125. With respect to the City of Boston's local permitting programs for operations that are not currently permitted by MassDEP regulations, MassDEP recommends that the City of Boston update its regulations to reflect the extension of MassDEP's permitting program to recycling, composting and conversion operations pursuant to general permits under 310 CMR 16.04 and individual permits under 310 CMR 16.05. As the City of Boston acknowledges, it is appropriately establishing a permitting program for only those facilities for which MassDEP does not require a permit. MassDEP's regulations would permit municipal authorities to continue to require local zoning, building, and other types of permits.

Comment: Local public health officials must be included in all siting and operation aspects of these facilities because it is the local officials that receive complaints from residents. Continuing disinvestment of MassDEP due to staffing levels does not indicate that there will be quick and efficient response to issues at the facilities from the state.

Response: MassDEP believes that the requirement set in 310 CMR 16.00 for operations working under general permits will be sufficient to ensure that owners and operators will take sufficient steps to control nuisances such as odors that generate complaints. Operations that need a site-specific MassDEP permit will be required to obtain MassDEP's approval of their plans for controlling nuisances and vectors, and may be subject to specific conditions in their permit. At the same time, since BOHs have independent authority to respond to nuisance conditions, MassDEP will endeavor to work with them in responding to specific complaints that cross both agencies' jurisdictions. Responding to complaints remains among MassDEP's highest priorities, even as our resources have diminished over the last several years.

- **Managing food waste introduces new considerations that require local participation**

Comment: The addition of food waste to a modest yard waste composting operation introduces new considerations which require local participation. We expect that Site Plan Review remains a local prerogative. Local government has a fundamental responsibility to its residents. The regulations reflect an ambition to circumvent such local oversight. All proposed changes should be reviewed with an eye to the consequences, with local government as a full participant in the evaluation, siting permitting and oversight of the digester.

Response: Note that small leaf and yard waste operations that are currently exempt from site assignment are allowed to accept putrescible material (such as grass clippings) that comprise up to 25% of the material they receive, and larger compost operations are currently allowed to accept up to 20 tpd of vegetative or food material, if they received a DON from MassDEP. Revisions have been made in the final 310 CMR 16.00 to:

- more clearly specify that all operations handling organic material (including food wastes) must have plans for managing potential odors and vectors, and plans to address contingencies such as the failure of odor control equipment; and
- clarify that the BOH must be notified at least 30 days before an operation begins its activities.

In addition, the amendments establish a number of important opportunities for municipal and local citizen comment and participation in the issuance of individual RCC permits for larger facilities. This includes public and municipal comment on draft permits, a municipal right to request a public hearing on a draft permit, and municipal and ten person group rights to request an adjudicatory hearing on the permit decision.

- **Controlling Potential Impacts from RCC Facilities**

Comment: There is general concern that a facility that manages putrescible materials may cause chronic nuisance conditions.

Comment: Processes involving animal carcasses or offal increase the difficulty in quality assurance of the final product, pest control, and public health concerns. The regulations should include provisions for avoiding the spread of disease through vector control, monitoring criteria, and ensuring that rigid rules for handling and processing are followed where animal carcasses or offal are involved.

Response: Due to these concerns, the amendments to 310 CMR 16.000 require that operations that are exempt from MassDEP regulation must operate without causing public health concerns or nuisance conditions. These requirements apply to all operations, no matter what types of material they bring in. Operations that have a general permit or a RCC Permit must develop and implement odor and vector control plans, as well as plans for handling contingencies in which the odor or vector control plans do not work.

Comment: MassDEP must balance the need to encourage new technologies in waste and organics management with the need to protect the residents and environment from adverse effects as a result of the technology. Examples of this are:

- A fire in the town of Wilmington at an agriculturally exempt compost site that utilized pig manure. The site stockpiled large amounts of organics which eventually caught fire. Also, the site was only accessible thru the Town of Tewksbury.
- Odors associated with fats, oils and grease trucks and the Baker Commodities facility in Billerica. Local officials must have the ability to regulate these types of issues.

Response: As with any commercial or industrial operation it is incumbent on the operator to safely manage the process. The standards for RCC operations that have been incorporated into 310 CMR 16.00 make it clear that each operation is responsible for controlling odors and operating safely. The amendments do not allow the stockpiling of incoming organic material. Instead, the regulations require daily incorporation of such material into compost windrows or piles or loading into an enclosed facility. Composting operations at farms will either need to meet MA DAR's standards (which are being updated and improved as part of the Executive Office of Energy and Environmental Affairs' 2012 Action Plan for Regulatory Reform) or comply with 310 CMR 16.00. In addition, MassDEP has enforcement authority to require the abatement of any nuisance conditions that occur. As noted above, local officials also have authority that is independent of MassDEP's authority to act on nuisance conditions in their municipality.

Comment: The regulations as proposed do not offer proper siting and performance requirements. They should offer specific conditions for the minimum standards for facilities and specific performance standards. For example, standards for nuisance conditions such as odors that would call for immediate revocation of an operating permit.

Response: The regulation has been designed to establish protective requirements and to recognize that different types of operations will need flexibility to decide how the standards will be met. Therefore, all RCC operations are required to have plans in place to control nuisance conditions such as odors, as well as contingency plans for situations in which the controls do not work. Due to the wide variety of operations (and the rate at which new technologies are being developed), MassDEP does not believe that more specific siting requirements are appropriate or desirable. In addition, as with any commercial or industrial operation, municipalities can also impose setbacks and other location restrictions through local building and zoning permits.

- **Technologies**

Comment: The proposal currently appears to focus on well-known technologies such as aerobic and anaerobic digestion. While this is understandable, the proposal should at least acknowledge that different types of solutions for organics processing may come forward. Otherwise, MassDEP and project developers could find themselves in the same type of situation in the future that the proposal is seeking to alleviate today.

Response: The regulation has been designed to be as technology-neutral as possible while acknowledging that different technologies will require different requirements to ensure that they operate without creating risks for public health, safety and the environment. Specifically, the category for "conversion" technologies in general and site-specific permits was established to provide a pathway for technologies other than aerobic and anaerobic digestion.

- **Quality of incoming material and products**

Comment: Proposed amendments represent an important step toward achieving the state's target, as set forth in the Draft 2010-2020 Massachusetts Solid Waste Master Plan. It is vital that MassDEP retain its focus on ensuring that the materials being used are safe and non-toxic in order to ensure that any products will also be safe for productive use.

Comment: The quality of the products of organics processing facilities is directly related to the quality of the incoming material and, as such, there should be standards established for the inputs to these facilities.

Response: These regulations use source control (also referred to as input control) as the primary means of preventing toxics or other contamination from ending up in the products produced during composting or conversion of organic material. Source control encompasses the principals of limiting the types of material used and having knowledge of how the materials are generated or are otherwise handled prior to receipt at a composting or conversion operation. The regulations incorporate the concept of source control through a combination of definitions. The definition of "organic material" is limited to seven specific categories of material which are then separately defined. Each specific organic material category is limited to: (1) a material resulting from food production, food preparation and consumption; (2) virgin plant material (including yard waste & clean wood); or (3) a biodegradable product or paper. These sources by their nature have a low level of concern for contamination with "toxic substances." Also, the regulations include the additional requirement that only source separated (see definition at 310 CMR 16.02) organic materials can be used in recycling, composting and conversion activities, which further reduces concerns regarding contamination.

Operations working under a general permit are required to establish specific plans to identify any toxics in their input material (through knowledge of the material's source or through testing), and to address situations where toxics are found in the input material or outgoing product. MassDEP will review toxic control plans and contingency plans at operations that require an individual RCC permit, and may establish specific input control measures or contingency plans that are designed to address the potential for toxics in incoming organic materials. Annual reporting will be required from all recycling, composting and conversion operations (except for the very small and material specific composting activities allowed under 16.03), which will require identifying, among other things, the amounts and types of all organic materials received. MassDEP plans to review the plans and data that operations develop about toxics in their input materials and products as it conducts inspections and reviews reports submitted by the composting and conversion operations, and may develop more detailed guidance in the future.

Comment: Regulations need to consider the geographic realities of New England and not create barriers to movement between states for beneficial use. Consider whether regulations may inadvertently promote shipping of materials across state lines to avoid in-state regulatory compliance issues. An example of this is the metals standards listed in 310 CMR 32.00.

Response: MassDEP has no authority to regulate shipments across state lines. While we work with other Northeast states to develop programs that are as compatible as possible, each state retains its authority to set standards as it sees fit based on local considerations. Therefore, there is some variability in the standards that states have adopted that establish maximum levels of certain

contaminants in wastewater treatment plant sludge that is applied to land (MassDEP's regulation governing land application of wastewater treatment plant sludge is at 310 CMR 32.00).

Comment: Digestate (both solid and liquid) should be classified as an agricultural material. Digestate is not a residual and should not be regulated under the solid waste regulations.

Response: Liquid (but not solid) digestate materials, if "discharged," are not defined as "residuals" under the final amendments; however, liquid digestate must be managed in accordance with applicable regulations.¹ Digestate can only be classified as an agricultural material if it meets the nutrient and other standards established by the MA DAR. MA DAR has advised MassDEP that this determination cannot be made on a blanket basis that would cover all residuals from anaerobic and aerobic digestion facilities. To the extent that markets exist for liquid or solid digestate (and that the digestate meets the standards that apply to those uses), MassDEP encourages digestate to be used and not disposed of. However, to the extent that liquid digestate will be applied to land, it will need to be applied "in accordance with all other applicable regulations and approvals, including but not limited to, a beneficial use determination" as stated in 16.04(3)(a).

Comment: MassDEP should not allow wastewater treatment plants and private companies to mix source-separated organic waste with sewage sludge in compost for multiple reasons:

- Sewage sludge contains chemicals, heavy metals, and pharmaceuticals that make it unsafe for many compost applications;
- Clean, source-separated organic waste should be kept separate from toxic sewage sludge and turned into fertile, clean compost. If combined, the possible health risk of sludge could negate the benefits of clean compost.; and
- If sewage sludge is processed with food waste, MassDEP needs to have stringent standards in place for ensuring that these facilities are well run and the contaminated end product is strictly labeled. The toxicity of a compost product containing sewage sludge and food waste needs to be properly identified and labeled as such.

Response: Currently, MassDEP does not prohibit mixing of sewage sludge with other organic material at composting facilities or at POTWs. If composting facilities want to accept sewage sludge, however, they are required to obtain a solid waste site assignment under 310 CMR 16.00, and a solid waste permit. POTWs also must be sited and permitted in accordance with applicable statutes and regulations. Compost or materials from POTWs that contain sewage sludge cannot be applied to land without a MassDEP approval under the land application regulations at 310 CMR 32.00. Sewage sludge can safely be applied to land as long as it meets the requirements of 310 CMR 32.00. Approvals to land apply septage/sludge are premised upon testing and sampling results, and include in some cases labeling requirements or site specific approvals for the locations the materials may be applied. In addition, the final amendments of 314 CMR 12.00 are designed to encourage POTWs to add source-separated organic material to their anaerobic digesters, which will allow the POTWs' anaerobic digesters to operate more efficiently, increase the quantities of

¹ The definitions in the final amendments do not include liquid digestate in the definition of "residual" material:

~~"Residuals or Residue~~ means all waste remaining after treatment or processing. Residuals remaining after treatment or processing are not ~~considered~~ pre-sorted material. Air and water discharges managed in accordance with applicable regulations are not ~~considered residue-residual.~~"

biogas the units produce to generate energy, and reduce the amount of sludge generated by their operations. This will have the added benefit of providing additional opportunities to capture the value of food and other organic material.

- **Opportunities for public participation in permitting RCC projects**

Comment: It is essential that MassDEP provide the public with meaningful opportunities to participate in the permitting of these projects.

Response: The final regulation expands the current opportunities for the public to provide input on site-specific RCC permits (currently, the regulation requires only that the BOH be notified of a DON), and by requiring that all draft permits be proposed for public comment. The final regulation also allows a host municipality to request a public hearing on a draft individual RCC Permit.

Comment: Commenter strongly supports increased opportunities for public input in the site-specific permit process; however, MassDEP is strongly urged to establish a clear timeline for permit review to ensure non-burdensome, timely review processes.

Response: MassDEP expects to develop permit timelines and application fees under its Timely Action and Fee Provisions regulation, which would be proposed for public comment before the timelines and fees are adopted. In addition, MassDEP is establishing permit appeal timelines in the final regulation similar to those established for permit appeals of superseding orders of conditions under MassDEP's Wetlands Regulations.

- **Structure of the proposed permit scheme**

Comment: Conceptually, the three-tier architecture of exempt activities, permit by rule, and permit by application makes sense. The real question is whether the various activities have been allocated to the proper categories so as to enable the twin goals of protecting the public health and environment while also encouraging the type of investment needed to build sufficient organics processing capacity. Here, we think the proposed amendments largely strike the right balance.

Comment: Having the organic materials broken into two groups and having different sites that can handle the different types of materials will cause the proposed plan to fail and reduce confidence in MassDEP that citizens have built up.

Comment: The increased composting of organic materials is a great idea but the process described in the public hearing draft is very complicated.

Response: The permit scheme has been designed to provide flexibility to project proponents and to provide important safeguards for the protection of public health, safety, and the environment. The regulation's risk-based approach requires regulating operations that will handle relatively inert material (that is less likely to generate nuisance conditions and vectors) differently than more complex operations that will handle highly putrescible material. MassDEP has used this approach over the last several decades to provide an appropriate and adequate level of regulation for widely varying facilities. This experience has shown that the public can come to understand that small and relatively simple operations can be regulated differently than more complex facilities.

Comment: Applauds MassDEP's motivation to reduce trash and increase recycling but is skeptical about all the paperwork, permits, and increased regulation. Compares this to the Open Meeting Law which was intended to increase greater participation and democracy but actually led to less. Instead it would be more important to teach people how to reduce trash and increase recycling. Would like to see more education of the public. Encourages industries such as electronics to have more take back programs for end of useful life products.

Response: Several factors are critical for successful diversion of valuable material from solid waste. There have to be facilities in place to recycle, compost or convert diverted material into new products or energy; generators need access to services that will take their diverted material to these facilities; and generators need to be educated and encouraged to divert their valuable material. This regulation provides a permit pathway for new facilities that will recycle, compost or convert diverted material, and it ensures that these operations will be implemented with protections for public health, safety and the environment. MassDEP agrees that more education of the public is needed, and that there is considerable room for product manufacturers to provide collection and recycling services for their "end of life" products. However, without operations that will actually recycle this material, an infrastructure for collection and transportation, and markets for the end products, recycling will not be successful.

- **Developing RCC Operations at Site Assigned Property**

Comment: MassDEP should give consideration to allowing a site assigned facility to add an operation that would be permissible under 310 CMR 16.04, such as a recycling operation or a digester, without the need to modify the site assignment. These new operations would still need to meet the requirements established in the regulations.

Response: The language regarding the operation of any RCC operation located at a solid waste facility has been clarified and moved to 310 CMR 16.01(11). However, the requirement for the operation to be in compliance/accordance with the facility's solid waste site assignment is still applicable. If the activity is not allowed by the site assignment, the facility owner would need to apply to the local BOH to have the site assignment modified as appropriate. MassDEP does not have authority to modify local site assignments.

- **MEPA must apply to exempt facilities**

Comment: The Board [of Selectmen] has further indicated the necessity of retaining Massachusetts Environmental Policy Act (MEPA) Environmental Impact Report (EIR) regulations.

Comment: MEPA review should also be required for a facility >300 tons per day.

Comment: The intended effect of the proposed revisions is that any facility for the "recycling" or "conversion" of organic solid waste, including food waste, would be exempt from site assignment requirements. By exempting food waste processing facilities from site assignment MassDEP has indicated they also would be removed from a categorical requirement under MEPA to submit an EIR. This would create a significant change to the way that MEPA operates. California performed a Program EIR for food-waste processing facilities.

Comment: Add "(g) Enforcement 16.01(8) requirement that an environmental impact study be conducted per Massachusetts Environmental Policy Act (MEPA)."

Response: The MEPA Office expects to begin a stakeholder process in 2013 to consider adopting minimum size thresholds for RCC operations that would require filing an Environmental Notification Form or an EIR before the operation can be constructed.

- **Massachusetts should release the final Solid Waste Master Plan**

Comment: We ...applaud MassDEP's efforts to build the capacity to process organic material in the Commonwealth. We continue to urge the Patrick Administration to finalize the Solid Waste Master Plan, which provides the context for these regulation revisions.

Comment: We urge MassDEP to finalize the Draft Solid Waste Master Plan and, in particular, to reaffirm its commitment to the Plan's proposed landfill ban on commercial and institutional food waste.

Response: The status of the Final Solid Waste Master Plan is separate from the proposed amendments to 310 CMR 16.00. The Final Solid Waste Master Plan is being reviewed by senior Administration officials. However, in advance of its publication, the Patrick Administration has clearly stated its commitment to reduction, reuse and recycling of as much material from the solid waste stream as possible, including this initiative to establish a clear pathway for ensuring that operations that handle diverted material will protect public health, safety, and the environment. The amendments to 310 CMR 16.00 are a significant step toward the goal of diverting commercial, institutional, and industrial organic waste from disposal facilities. MassDEP is currently working with stakeholders to develop a regulatory framework for a ban on commercial and institutional organic waste. These final regulations play an important role in moving towards a ban on organic waste by clarifying the permitting of organics capacity.

- **Implementation:**

Comment: What will be the expected effects via the changes in the regulations and the increase in the number and/or size of these operations *in smaller* communities such as Halifax?

Response: MassDEP does not have an estimate of the number of RCC facilities that will be developed under this regulation. To a large extent, this will depend on the quantities of various kinds of material that are diverted from the solid waste stream by generators (industries, institutions, commercial establishments, residents, and municipalities), and how receptive municipalities will be to hosting operations to manage this material.

Comment: While there is support of the efforts to ease siting restrictions for small scale composting operations and MassDEP has included reasonable standards for Permit by Rule vs. permitted facilities, there is a concern that these facilities may fall out of compliance. Therefore, MassDEP should commit to random inspections of Permit by Rule facilities to set a tone that enforcement is still a priority for these types of operations.

Response: The final regulation has been designed to allow MassDEP to focus its resources on permitting larger and more complex operations and on conducting inspections at facilities operating under both general permits and individual permits (including periodic random inspections and inspections targeted to follow up complaints and other information about potential non-compliance), as well as other assessments of compliance with the standards for operations.

Comment: The amendments must allow for proper education and outreach to the 80 recycling and composting operations in the Commonwealth operating under a DON to ensure that these operations are aware of the changes and are grandfathered in a timely and efficient manner.

Response: MassDEP agrees and will conduct outreach to the existing recycling and composting operations in the Commonwealth to ensure that their owners and operators understand their new obligations under the final rule.

- **Non-regulatory state support for the development of organics processing capacity**

Comment: The proposed regulations do not address:

- The need for support of product markets including having biogas recognized under the renewable portfolio standards (RPS) and having state purchasing of compost and similar products; and
- The challenge of gaining public support for organics processing facilities and uses of products.

Response: MassDEP agrees, and has been working with other state agencies under the Task Force on Building Organics Capacity in Massachusetts that was established in January 2010 by the Secretary of Energy and Environmental Affairs to develop non-regulatory state support for organics processing capacity. Non-regulatory initiatives have included the development of a plan for encouraging the development of infrastructure to support organics processing (see: <http://www.mass.gov/dep/public/committee/swacorg.htm>), availability of technical and financial assistance for anaerobic digestion from the Massachusetts Clean Energy Center (<http://www.masscec.com/>), support for legislation that will recognize biogas under the renewable portfolio standard, and support for agricultural applications of anaerobic digestion.

- **Other regulatory approvals that an RCC operation may need to obtain**

Comment: An AD operation taking low solids material will generate large amounts of liquid digestate, and if there is no ability to land apply it based on its location, then the liquid is sent to a waste water facility. The liquid digestate may have a significant impact on the waste water facility's nutrient levels in the discharge.

Response: Discharges of liquid digestate to a sewer will need approval from the appropriate sewer authority, which would be responsible for ensuring that the wastewater treatment system can handle the discharge.

Section Specific Comments

310 CMR 16.01 – General Purpose

- **General Purpose 16.01(1)**

Comment: This section does not list a purpose. A clear and concise purpose statement is essential to the success of the regulation in achieving the goal that underlies the regulation.

Response: MassDEP agrees with the comment and has revised 310 CMR 16.01 to include a purpose statement as well as to pull other general requirements into this section from other proposed sections of the regulation.

Comment: The proposed regulations should make express the applicability of the waiver provisions at 310 CMR 16.18 at 16.01 and 16.05.

Response: No revisions were proposed to the waiver criteria at 310 CMR 16.18 and therefore the section was not included in the Public Hearing Draft. Furthermore, the waiver provisions at 310 CMR 16.18 clearly state that they apply to Part I of the regulations including 310 CMR 16.03, 16.04, and 16.05.

- **16.01(3)(d)**

Comment: We find the statement of non-applicability of the site assignment requirements to exempt activities and operations a little confusing, as it is drafted to apply to owners and operators rather than facilities. We believe this statement should apply to facilities, not to owners and operators.

Comment: Does MassDEP mean to have owners and operators and not the facilities themselves considered exempt from site assignment requirements?

Response: MassDEP agrees with the comments and has removed 16.01(3)(d) and added a statement of applicability in 310 CMR 16.03, 16.04 and 16.05.

Comment: Language in 16.01(3)(d) is too broad to the extent it seeks to invalidate the exemption if a facility (or owner or operator) is not in compliance with “all other requirements that may apply.” Instead we suggest that the exemption should not apply only if a facility “fails to conduct its operations consistent with the requirements of 310 CMR 16.00.”

Response: This section [which is now 16.01(8)(a)] has been clarified.

Comment: Language proposed in 16.01(3)(d) is too broad where it states that the exemption will not apply if beneficial reuse is not in compliance with “all other requirements that may apply.” Instead, we suggest that the exemption would not apply only if the beneficial reuse is “not conducted consistent with the requirements of 310 CMR 16.00.”

Response: Since other regulations such as wetlands requirements may apply to the beneficial use of a material, no changes have been made in response to this comment.

- **16.01(8)**

Comment: Request that DEP clarify in this section that any place site assigned or conditionally exempted or permitted will not be subject to site assignment pursuant to MGL c.111, s.143. At least two courts have clarified that facilities subject to c.111, s.150A or 150B are not subject to c.111, s.143. DEP should clarify that facilities operating under a conditional exemption or permit pursuant to 310 CMR 16.00 are subject to 310 CMR 16.00 and not to c.111, s.143.

Response: The Noisome Trade statute (M.G. L. c. 111, §143) gives BOHs the authority to determine whether an activity should be regulated as a “noisome trade.” MassDEP does not have the authority to make this decision, and therefore cannot make the clarification suggested. On the other hand, as noted above, RCC operations are not the type of “noisome trade” that was targeted by M.G.L. c. 111, § 143, such as piggeries. MassDEP believes that local BOHs should consider RCC operations to be modern industrial operations that will be regulated under the final amendments to 310 CMR 16.00 in a way that is sufficiently protective of public health, safety and the environment without requiring any local site assignment.

- **16.01(9)**

Comment: There should be no time limit imposed on speculative accumulation. Some commodities simply must be stored for longer periods of time. If MassDEP believes a time limit is necessary, we believe that recycling or transfer of at least 75% of material within 180 days of receipt is too restrictive. For hazardous waste, both MassDEP and the U.S. Environmental Protection Agency (EPA) allow for recycling or transfer of 75% within the course of a year. Recycling facilities need flexibility. One year is a far more appropriate time frame.

Comment: The proposed changes to speculative accumulation will have unintended consequences. The new limits will impair the ability to economically and efficiently recover materials.

Response: MassDEP agrees with the comment. Instead of setting a default time frame for speculative accumulation, MassDEP has eliminated the definition of the term and has set time limits for accumulation of material for each type of activity. For example, the time limit for recycling and composting operations in the “general permit” category” has been increased to one year running from receipt of materials at the facility.

- **16.01(10)**

Comment: This section does not discuss actions resulting from an inspection by the local BOH or its agents. The BOH should have at least an advisory role in the siting and enforcement of these regulations. This can be achieved by requiring the BOH to report its findings to MassDEP for further evaluation and enforcement.

Response: This section details the process by which MassDEP will determine whether a violation of 310 CMR 16.00 has occurred and the relevant parties’ appeal rights. MassDEP carefully considers all information that a BOH (or its agents) provides about a potential violation. However, the responsibility lies with MassDEP to determine whether a violation has occurred that warrants enforcement action.

- **16.01(10)(a)**

Comment: This section (which lists conditions which constitute violations of the regulations) should provide a “right of access for inspection to the local BOH.”

Response: MassDEP does not have the authority to provide a right of access to BOHs. If a BOH member or agent wants to enter a property being used for an RCC operation, it would need to look to its own authority for access.

Comment: This section makes no mention of failure to file reports and/or submit records. Add a new requirement – “(9) Fail to keep adequate records to substantiate all quantitative requirements, including but not limited to volumes and time frames including daily restrictions.”

Response: This section [which is now 16.01(8)(a).] has been revised to specify that MassDEP may take enforcement action for failure to submit a report and/or records.

- **16.01(10)(b)1 and 2**

Comment: We suggest the DEP reconsider whether it needs both (10)(b)1 and 2. We think they accomplish the same thing and that DEP can delete 1 and retain 2.

Response: In general, MassDEP finds that most situations involving non-compliance can be dealt with by stopping the specific illegal activities but allowing the facility to continue to operate. However, there are situations in which remediation requires shutting down the operation. MassDEP needs to preserve its authority for both options [Please note that this provision is now at 16.01(8)(b).].

- **16.01(10)(b)3.**

Comment: Consider adding to 3. “or any” to be consistent with 1. and 2.

Response: MassDEP agrees with the comment and has made the change as suggested.

- **16.01(10)(c)**

Comment: Encourage MassDEP to include the additional right to request an adjudicatory hearing in the event MassDEP takes any of the actions listed in 16.01(b) relative to a permit. Proposed language does not address permit actions. If MassDEP seeks to rescind, suspend, revoke, or modify a permit there is a statutory right to appeal under c.111, s.150A and c.30A. This appeal right should be directly stated in this section, as follows:

“A person who is the subject of an action by the Department to rescind, suspend, revoke or modify any permit issued pursuant to 310 CMR 16.00 shall have the right to request an adjudicatory hearing on such order within 21 calendar days of the date of service of Department’s intent to change the permit by filing a notice of claim with the Department in accordance with the procedures set forth herein and in 310 CMR 1.01.”

Response: MassDEP has revised the regulation to clarify that it may act to rescind, suspend, revoke or unilaterally modify a permit through an order. A person who is subject to an order issued pursuant to 310 CMR 16.00 has a right to an adjudicatory hearing [310 CMR 16.01(8)] in the final rule. Permit modifications at the request of the applicant would be subject to the appeal procedure set forth in 310 CMR 16.05 for permit decisions.

- **16.01(10)(d)**

Comment: Add protective language to clarify the procedural requirements that must be met when an order is issued to ensure that no waiver of rights to appeal will occur if MassDEP fails to follow these requirements. The proposed language would waive the right of a recipient of an enforcement order to an adjudicatory hearing, if an appeal is not timely filed. However, under 310 CMR 1.01(6)(b), MassDEP must specify in any order the facts relied upon as the basis for the action, must cite to any statute or regulation which authorizes it to take the action, and must inform the recipient of its right to request and adjudicatory appeal. No waiver of a right to a hearing should occur unless MassDEP complies with these provisions. We therefore request that MassDEP condition the proposed waiver language on MassDEP compliance with the mandatory provisions of 310 CMR 1.01(6)(b).

Response: Under many years of decisional authority, timeliness of the filing of an appeal is a jurisdictional matter. If a request for an adjudicatory hearing is not timely filed, then MassDEP does not have jurisdiction to schedule a hearing. On the other hand, the failure by MassDEP to follow its own procedures for issuance of an order might or might not result in harm to the due process or other rights of the recipient of the order. The effect of MassDEP procedural errors

would be a matter for the hearing officer and ultimately a court to decide. Therefore, MassDEP has not made any change to this section.

310 CMR 16.02 – Definitions Note: In this section, comments are noted by designating the definition in question followed by MassDEP’s response.

- Aerobic Digestion and Anaerobic Digestion - The proposed definitions of aerobic and anaerobic digestion state that the processes “yield products that can safely be used.” This does not seem to be MassDEP’s intent. The use of the products should be determined in the Beneficial Use Determination (BUD) Process.
Response: This language was removed from the definition and added as a requirement in the aerobic and anaerobic digestion sections of the regulations. Larger aerobic and anaerobic digesters will require RCC Permits, and MassDEP will review the types of products and proposed uses for those products during review of the application. Separate review under the BUD regulations may be necessary for these operations.
- Board of Health is not defined
Response: Board of Health is defined at 310 CMR 16.20, Public Hearing Rules. That definition has been moved to the definitions at 310 CMR 16.02.
- Agricultural Material, Asphalt Pavement, Brick, and Concrete Rubble, Cathode Ray Tube, Compostable Material, Food Material, and Vegetative Material, are terms defined without the use of the limiting word “discarded.” This is completely reasonable, as “discarded material” is one of the categories defined to be a solid waste. The definition of “Clean Wood” is inconsistent with these other definitions and limitation, in that “Clean Wood” as proposed, is defined as “discarded material..., including but not limited to...” As written, this could be construed as solid waste. Under many conditions, clean wood would not be considered solid waste at all. Replace “discarded” in the definition with “source separated” and remove “or likely to contain.”
Response: “Discarded” was removed from the definition as suggested. MassDEP did not remove “or likely to contain” because MassDEP believes that, in some cases, generators of this material may want to make their decision on diversion from waste based on the likely presence of any of these contaminants as opposed to documented evidence (such as laboratory analysis). Retaining this provision keeps a clear signal to generators that they are responsible for knowing whether their material contains contaminants.
- Combustion - Add a definition for “combustion” which is referenced in the definition of “combustion facility.”
Response: A separate definition for “combustion” is not necessary because the current definition describes these facilities as those employing “controlled flame combustion, the primary purpose of which is to thermally break down solid wastes, producing ash that contains little or no combustible materials...,” which explains what is meant by “combustion.”

- Compostable Material – “conversion” should be included in the definition. Add after “composted” the words “and/or converted.”
Response: The definition has been removed from the regulations. The term “Source Separated Organic Materials” will be used in its place. The definition of “organic materials” is limited to those materials that qualify as “organic” materials, and does not include any of the several options available for managing it.
- Compostable Material – proposed change eliminates the qualifier that material be “not contaminated by significant amounts of toxic substances.” The proposed definitions of aerobic digestion and anaerobic digestion retain this “which can safely be used” language with no context. The proposed language substitutes an even less specific “safe use” standard, which is not articulated anywhere in the regulation. This is a key issue, since a “product” of aerobic or anaerobic digestion that cannot “safely be used” will either require disposal (as a waste) or it will end up accumulating at the digestion site. The vague “safe use” standard suggests that there may be more than one standard, as is the case for wastewater residuals.
Response: The definition has been removed from the regulations. The term “Source Separated Organic Materials” will be used in its place. The requirement that the material not be contaminated has been carried over as a requirement in the exemption sections of the regulations where composting, anaerobic digestion, and aerobic digestion are discussed.
- Composting or Composted -
 - Mentions windrows and piles, but does not define either term. Expand to include other processes including in-vessel systems (aerobic) that would include rotating drums, covered aerated piles, covered bays and agitated bays.
 - MassDEP should abandon its definition of “composting or composted” and adopt the definition used by the United States Composting Council (USCC). These regulations should allow composting to be done with technology other than windrows such as in-vessel, drums, etc. USCC defines “compost” as:
“Compost is the product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and ‘process to further reduce pathogens’ (PFRP), as defined by the U.S. EPA (Code of Federal Regulations Title 40, Part 503, Appendix B, Section B), and stabilized to the point that it is beneficial to plant growth.”**Response:** MassDEP considers covered aerated piles, agitated bays and covered bays to be composting systems, and this has been clarified in the definition. Activities that occur in vessels, such as rotating drums, are covered by the term “aerobic digestion” and are not composting. The definition of aerobic digestion has not been changed.
- C&D Waste – The term C&D Residuals should be eliminated from the definition of C&D waste. DEP should add the above definitions of C&D residuals from the Waste Ban Plans in 16.02.
Response: C&D residuals are a solid waste material and since this material is the waste remaining after other recyclable C&D materials have been removed, C&D residuals need to be managed as solid waste. Therefore, this suggestion has not been accepted.

- Conversion -
 - Should distinguish between low-heat and high-heat conversion technologies. The term “anaerobic digestion” should be used where that is the intended meaning because “conversion” also includes high-heat technologies, such as gasification and its variations. High heat conversion technologies should not be exempt from site assignments.
 - The terms “conversion” or “converts” should be stricken from these regulations because these terms include high-heat technologies that destroy the feedstock for energy or fuel and produce by-products that have not proven to be marketable.
 - Inclusion of “thermal” suggests that conversion can include the burning of compostable materials, which is inconsistent with DEP’s apparent intent.

Response: MassDEP has not made any change to the definition of conversion. This will allow MassDEP to evaluate a wide range of technologies including high heat technologies such as gasification. In addition, conversion operations permitted under the final amendments are only allowed to utilize source separated organic material, and are therefore consistent with MassDEP’s intent to promote new technologies.

- Conversion
 - Should be expanded to include “processing of organics for reuse as a feedstock into new products and/or energy.”

Response: The regulation has been clarified to note that processing of recyclable or organic materials for reuse as a feedstock in support of RCC operations will be allowed under RCC permits (see 310 CMR 16.05).

- Conversion - The definition of conversion should recognize that biogas is produced during the anaerobic digestion process.

Response: No change has been made. MassDEP believes this is the common understanding of the existing definition.

- Conversion - The prohibition of combustion of a material that is in the definition of “recycle” could be inserted into the definitions of “composting” and “conversion.”

Response: The definition of composting does include combustion because combustion is not a type of aerobic digestion. Conversion could include combustion, but permits for conversion activities are limited to conversion of source-separated organics. No change was made.

- Conversion - Covanta has two projects, one with a DON as a recycling operation and one permitted as a demonstration project to convert organic waste material into a renewable diesel fuel. These types of projects, if permitted under the proposal, would presumably be subject to 310 CMR 16.05. However, the catalytic system does not appear to meet the proposed definition of conversion. Covanta suggests that the definition of “conversion” be expanded as follows:
 - “...aerobic or anaerobic digestion of compostable materials, or enzymatic, thermal or chemical degradation of compostable materials, or mechanical, chemical or catalytic treatment of compostable materials to produce usable products.

Response: Chemical or catalytic treatment is a type of “chemical degradation,” and is therefore already included.

- Conversion - Definition should be modified to include, “Conversion also means the processing of compostable materials for reuse as a feedstock into new products or energy.” We believe the definition of conversion should include a pathway toward converting organics into feedstock materials for AD facilities that can create a fuel as a by-product.

Response: MassDEP does not consider mechanical treatment to be “conversion” but includes it in the definition of “handling.” The regulation has been clarified to note that handling (see definition in 16.02) of recyclable or organic materials for reuse as a feedstock in support of RCC operations will be allowed under RCC permits [310 CMR 16.05(1)].

- Facility - does not encompass the entire definition, as defined in MGL C.111, s.150A. In order for this regulation to comply with its enabling legislation, all the definitions must comply with the definitions set forth in its enabling states.

Response: The definition of “facility” in M.G.L. c.111, s. 150A includes “a sanitary landfill, a refuse transfer station, a refuse incinerator rated by the department at more than one ton of refuse per hour, a resource recovery facility, a refuse composting plant, [and] a dumping ground for refuse.” The regulation defines “facility” as a site “which is, has been or will be used for the handling, storage, transfer, processing, treatment or disposal of solid waste.” No change was made to the definition because MassDEP believes the types of facilities listed in the statutory definition are included in this phrase.

- Infectious Waste – Please add a specific citation for 105 CMR 480.020(4)(a), (b), and (c) which provides specifics that further define “contaminated” animal waste including carcasses, body parts, and bedding.

Response: The definition of infectious waste has been replaced with MDPH’s definition of “Medical or Biological Waste” in 105 CMR 480.000, and MassDEP believes that, by citing the entire chapter of MDPH’s regulation, this issue is covered.

- Operation – definition appears to be ambiguous. The facilities covered under the proposed definition of “operation” are/should already be encompassed in the definition of “facility.”

Response: The definition of “Operations” has been revised to refer to RCC activities subject to 310 CMR 16.03, 16.04 or 16.05, and the property on which any such activities take place, whereas “facilities” refers to solid waste management activities subject to site assignment and a solid waste permit.

- Organic Material -
 - revise by adding “clean wood.”
 - would include “agricultural material,” thus including carcasses and other animal by-products. Taken with the definition of “compostable material” means that animal hides, offal, and carcasses and compostable material. In this context, the exclusion of sanitary wastewater treatment residuals from compostable material makes little sense.

Response: “Clean wood” has been added to the definition of Organic Material. Carcasses are already included in the definition of Agricultural Material. Sanitary wastewater treatment residuals contain heavy metals and potentially other toxic compounds and facilities managing wastewater treatment plant residuals either need to be site assigned pursuant to 314 CMR 5.00 or as a solid waste management facility pursuant to 310 CMR 16.00 and 19.000 if not located at a wastewater treatment plant.

- Product is not defined, although creation of a “product” is key. Suggest adding: “Product means a material or by-product, including intermediate products such as biogas, generated through a recycling, composting, or conversion operation as defined in 310 CMR 16.00 and approved by the Department pursuant to 310 CMR 16.03, 310 CMR 16.04, 310 CMR 16.05, or 310 CMR 16.06.”

Response: To maintain flexibility for the wide variety of RCC operations, MassDEP has not added a specific definition for “product” to the regulation.

- Putrescible - somewhat vague. Should refer specifically to “organic material,” or some specific Carbon:Nitrogen ratio.

Response: The definition of putrescible has been deleted.

- Putrescible - The definition of Putrescible Material may conflict with “recycled material” and “garbage.” It appears that putrescible material would be considered garbage and not a recycled material. Although putrescible waste is separated from solid waste, it still has all the characteristics of garbage and therefore should be permitted by the local BOH.

Response: The definition of putrescible has been deleted.

- Recycle or Recycled - Reuse should not be included in the definition of “recycle or recycled.” “Recycle” should only refer to use as an ingredient or feedstock in an industrial or manufacturing process. As MassDEP is aware, reuse is far more beneficial than recycling, so it is important for public education that the terms not be used interchangeably; this is especially true because “Extended Producer Responsibility” legislative language distinguishes between reuse and recycling

Response: No change was made to the definition because including reuse as part a recycling operation allowed pursuant to a conditional exemption, general permit or RCC Permit is an integral part of this regulation.

- Residence – should include mobile home communities. We suggest the following alternative residence definition: “Residence or residential means a single, multi-family, mobile home, group home or apartment complex....”

Response: MassDEP did not make the suggested change. A mobile home is covered by the definition of “residence.”

- Residuals or Residue - Materials that remain after processing or treatment, like construction and demolition (C&D) residuals, should be deemed waste in these regulations and authorized for disposal.

Response: MassDEP agrees and considers material remaining after processing or treatment to be waste materials.

- Residuals or Residue - Definition should be expanded to identify that “residuals consist primarily of non-recyclable material and are appropriate for disposal.” This will clarify that residuals are different from construction and demolition waste, a common uncertainty as it relates to existing waste-to-energy facility permits that prohibit the disposal of C&D Waste. Landfills will reach capacity, necessitating their disposal at Waste to Energy facilities.

Response: Material remaining after recyclables have been removed from any waste is a “residual,” including residuals from C&D processing facilities.

- Solid Waste or Waste - Does not comply with the definition of “Solid Waste” as defined at M.G.L. c.16, §18. The proposed regulation should include the statutory definition of “Solid Waste” and can refer to 310 CMR 16.01(3)(a)-(c) as the exceptions to the definition. MassDEP has no authority to exempt any composting or “conversion” facilities from site assignment without amending the enabling legislation.

Response: M.G.L. c.16, §18 is not cited as authority for the final regulations. M.G.L. c. 16, § 18 relates to the MassDEP’s responsibilities to draft and update a Solid Waste Master Plan and not to its authority to regulate the disposal of refuse or to establish programs for recycling, composting and conversion. MassDEP has authority to establish RCC permitting and regulatory programs and to exempt these facilities from site assignment pursuant to M.G.L. c. 21A, §§ 2 and 8, M.G.L. c.21H, § 7, M.G.L. c.111, §§ 150A and 150A1/2. The provisions of M.G.L. c. 21A and c. 21H, § 7 provide broad authority to MassDEP to establish programs for RCC operations, which includes permitting of such facilities. In addition, M.G.L. c. 111, §§ 150A and 150A ½ confer authority on MassDEP to make determinations about what materials are solid wastes (refuse), what are not, and which facilities or operations need a site assignment for solid waste activity and which do not. MassDEP has exempted recycling and composting activities from site assignment through provisions of 310 CMR 16.00 for conditional exemptions or DONs for such operations. MassDEP is acting under this same authority to expand those exemptions to organic conversion facilities in the amendments to 310 CMR 16.00.

- Solid Waste or Waste - Subsection (i) of this definition indicates that to be exempt a pre-sorted material must be “in compliance with” 310 CMR 16.03 or 16.04. We request that DEP use alternate wording to describe this limitation as we do not believe that the phrase “in compliance with” is accurate in the context of an exemption or a conditional exclusion. Revise to state that pre-sorted material is exempt if it is managed “consistent with the provisions of” 16.03 or 16.04.

Response: The suggested change was made to the definition.

- Solid Waste or Waste - The proposed addition of (j) to the definition appears to expand conversion technology and provide a clear permitting path for new facilities. That intent may not be clear from this addition. It could be interpreted as a limitation, e.g. that source separated material is ONLY excluded from the definition of Solid Waste when processed at a POTW. That interpretation is inconsistent with MassDEP’s intent. Suggest adding “or at a Conversion

Operation, as defined in 310 CMR 16.02 and as approved by the Department pursuant to 310 CMR 16.04 or 310 CMR 16.05.” to the definition.

Response: MassDEP agrees with the comment, and has modified the language to exempt source separated organics when used consistent with 310 CMR 16.04 or 16.05 or at a wastewater treatment plant.

- Solid Waste or Waste - Waste – should be defined as being material “abandoned for use” or transported or stored pending deposit in a landfill or incinerator. Note also that “discarded” means rejected for personal use, but may entail directing to reuse, recycling, or composting. Therefore, food on its way to a composting facility is not “food waste” but “discarded food.”
Response: The words “useless, unwanted or abandoned” were re-inserted in the definition, and the definition clarified to include materials that are disposed or stored, treated or processed pending such disposal.
- Source Separated - The definition should be changed to read, “Source separated means separated from solid waste at the point of generation and/or kept separate from solid waste.”
Response: MassDEP does not agree that the source separated definition should be modified in this way.
- Source Separated - Taken with the definition of “solid waste or waste,” appears to create a circular definition for organic material. Is the intent to say that “source separated” in the case of organic material means separated from non-organic material?
Response: For organic materials, source separated primarily means separation at the point of generation and kept separate from the solid waste stream. No change was made to the definition.
- Speculative Accumulation and Storage – Materials subject to speculative accumulation should be limited to waste regulated by 310 CMR 16.00 as should the storage of the materials MassDEP would control by these regulations. Otherwise, these definitions may have unintended consequences.
Response: The definition of speculative accumulation has been removed. Instead, MassDEP has established time limits for the accumulation of recyclable and organic materials.
- Storage – Definition has been drafted too broadly. Consider removing the reference to the containment of any “material.”
Response: MassDEP disagrees with this comment and has not made any change.
- Yard Waste – Request that the definition be changed to substitute “Clean Wood” for “brush.” This would allow stump grindings, chips, sawdust, and brush to be included at yard waste composting operations. If there is some prohibition of these materials from leaf and yard waste composting, then we would ask that a definition of “brush” be added, as one is not included in the current draft of these rules.
Response: No change has been made to the definition of yard waste. However, MassDEP has removed the category for yard waste composting operations. This change would allow the composting of clean wood provided the operation ensures that no more than 25%, by volume, of

the total compost mixture shall be a Group 2 material (as listed in Table 1 at 310 CMR 16.04), or a material with a carbon to nitrogen ratio of 30:1 or less.

310 CMR 16.03 – Exemptions from Site Assignment

- **16.03**

Comment: Revise opening statement addressing which activities are subject to site assignment and which are exempt. Clarify that “facilities regulated under 310 CMR 16.03 have been categorically exempted by DEP and are not required to obtain site assignments under MGL c.111, s.150A or permits under 310 CMR 19.000.”

Response: 16.03(1) and (2) have been revised to more clearly state which activities are exempt from site assignment and a solid waste permit and which, or when, activities are subject to site assignment and a solid waste permit.

Comment: What does MassDEP want to do in this section? Is it to exempt categorically facilities in 16.03 from site assignment under M.G.L. C.111, § 150A, or permits under 310 CMR 19.000? If so, we concur and support this change.

Response: Yes, this section exempts certain activities from both site assignment and a solid waste facility permit, and the language of the regulation has been clarified.

- **16.03(1)(c) Burden of Proof**

Comment: Consider removing this subparagraph in its entirety. There are circumstances in which it would not be proper for DEP to require an owner or operator to affirmatively prove that its activities do not create a nuisance or pose a threat to public health, safety or the environment.

Comment: The proposed change in burden of proof standard on the proponent about nuisances, threats to public health or safety or the environment is too much. It should not be adopted.

Response: MassDEP revised the provision to require the owner and operator to have the burden to establish that the facility does not pose a nuisance or a significant threat to the public health, safety and the environment in all proceedings. The owner and operator have the information available and the responsibility to provide the evidence to support its burden. A similar burden is placed upon owners and operators of solid waste facilities and upon other entities regulated by MassDEP. The burden of proof section has been moved to 310 CMR 16.01(7).

- **16.03(1)(d) Access**

Comment: Section does not require access for a BOH. The BOH should be granted access, similar to MassDEP.

Response: MassDEP does not have authority to grant access rights for BOH. See discussion under “General Comments”.

- **CMR 16.03(2)**

Comment: The list of operations that would be exempted from site assignment includes cement and concrete plants, foundries, asphalt batch plants, rendering plants, and operations that recycle clean wood, municipal food material collection and storage, larger composting allowances at non-farm, non-residential locations, and CRT operations. Removal of site assignment review eliminates the role of the board of health and does not allow a determination of site suitability to

be made for the operation. The types of operations listed above have generated significant residential complaints to the BOHs, the Massachusetts Department of Public Health/Bureau of Environmental Health. Rather than exempt these industries, it may be useful to provide regulatory steps to address potential health impacts rather than addressing possible health concerns and/or nuisances after.

Response: MassDEP is adding the five specific types of manufacturing operations noted by the commenter to a list of storage and processing activities that have been exempt from site assignment since 310 CMR 16.00 was first promulgated in 1990. These types of operations are not solid waste facilities and are not appropriately regulated by the site assignment regulation (although they may need other state environmental permits, e.g., for their air emissions). Over the last 20 years, MassDEP has not received complaints about any significant *solid waste* management issues for these types of facilities.

- **16.03 (a)8 Cement and concrete plants**

Comment: Cement plants should not be added to the list of manufacturing exempt from site assignment, given the well-known health threats posed by these plants. US EPA acknowledged the very high levels of mercury and particle emissions from cement plants when new emissions standards for these facilities were announced in 2010; these standards will not be fully implemented until 2013. In addition, a May 2012 report on the risk of hospital admissions for a population living near a cement plant showed an association between NO_x with respiratory and cardiovascular pathologies; children appeared especially susceptible.

Response: Cement and concrete plants are subject to MassDEP's air quality permitting regulations which address the issues raised. Such plants use recyclable materials, and these regulations clarify that cement and concrete plants are not subject to site assignment and permitting when utilizing recyclable materials as a feedstock. No change was made.

Comment: Request addition at the beginning of this section of a statement that "the following activities do not require either a site assignment or a permit pursuant to 310 CMR 16.00 or 19.000."

Response: The suggested addition was made to the regulation.

- **16.03(2)(a)11**

Comment: Replace the word "use," which is not defined, with the word "conversion" which is defined.

Response: "Use" is a broader term than "conversion." In many cases clean wood will be simply chipped and used for mulch, ground cover or as a bulking agent or for other uses where "conversion" is not the goal. Therefore, no change was made.

- **16.03(2)(a)12 Rendering Plants**

Comments:

- Do not exempt rendering facilities. The goal of the regulatory revision is to improve organics processing through a closed loop where all materials are repurposed. Therefore, rendering operations should not be allowed to operate outside MassDEP's waste processing regulations.

- We request that rendering facilities not be exempt facilities under 310 CMR 16.03(2)(a)12. This would allow any rendering operation to operate outside the regulation of waste processing sites, when MassDEP has indicated that the processing of organics is a regulated activity for all other forms of processing or management. Exempting this processing option without a sound scientific, regulatory or policy basis creates an unequal playing field.

Response: Rendering plants have historically operated outside the solid waste regulations. The goal of including rendering plants in the exemptions is to clarify that they are not subject to the solid waste regulations. Rendering plants are, however, potentially subject to other MassDEP regulations such as the Air Pollution Control Regulations.

- **CMR 16.03(3)(a)1 Temporary Solid Waste Storage**

Comment: MassDEP is replacing the current exemption for solid waste containers with an exemption that requires the owner and operator to incorporate best management practices and to not present a threat to public health, safety or the environment. The new requirements will apply to hundreds of thousands of locations in the Commonwealth. There is no reason to burden hundreds of thousands of locations with new requirements for their solid waste containers. There is no current problem and therefore no reason to change. What does it mean to use best management practices for a solid waste container? Owners will be sued by citizens groups claiming that the containers used are not the best possible containers etc. This change will cause more problems than it fixes.

Comment: Under the current rule, dumpsters and containers are exempt from regulation in 310 CMR 16.00 and 19.000. The proposed language would substantially change that status, and would require the use of “best management practices.” MassDEP does not discuss the rationale for these changes. Ask that DEP retain the current language.

Response: The final regulation exempts temporary solid waste containers and certain other solid waste handling activities from the requirements of 310 CMR 16.00, as long as they are properly managed and do not create nuisances. MassDEP recognizes that “best management practices” vary considerably for the exempted activities in this list. For solid waste containers, the best management practice is most likely to be “empty frequently enough to avoid creating odors and attracting vectors.” More detailed and explicit best management practices may be more appropriate for other activities in this list. MassDEP wants to clarify that owners and operators of these containers are responsible for maintaining them in good condition.

- **CMR 16.03(3)(a)2 Temporary Storage by Public Works Department**

Comment: Consider revising to include the words Massachusetts Bay Transportation Authority (MBTA) specifically.

Response: MassDEP agrees with the comment and has amended the regulation by removing specific references and referring more broadly to locations “controlled by a public works department such as a municipal or state department, agency or authority of public works, transportation, public parks or recreation or similar government entity, ...”[310 CMR 16.03(2)(a)2. in the final rule]

Comment: Add the words “agency, or authority” after department, which occurs twice in the paragraph, so that it is clear that this exemption applies to the MBTA.

Response: MassDEP has made the change suggested.

- **CMR 16.03(3)(a)3 Occasional Solid Waste Vehicle Layover**

Comment: The exemption needs to be clearer. Companies that haul waste need the ability to park the vehicles overnight on longer runs, during periods when drivers need to take breaks mandated by the U.S. Department of Transportation, or when receiving facilities are closed. Layovers should not be limited to 72 hours at a time. Under the Hazardous Waste program trucks can be held for up to 10 days. It should be permissible to transfer a closed container from one truck to another.

Response: No change has been made to the regulations. This exemption allows occasional overnight or over-weekend storage on a site owned by the waste management company without the need for a site assignment or solid waste permit. This does not impact locations where a truck may stop overnight while in-transit such as a truck stop location. If it is anticipated that trucks with loads of waste need to be stored on a regular basis at a specific site then that site should be regulated as a solid waste management facility with site assignment and a permit. While the hazardous waste regulations allow for a longer layover period, solid waste is more likely to cause odor, vector and other nuisance problems if stored for an extended period, particularly if parked in an unsuitable location.

- **CMR 16.03(3)(a)5 Hospital and Laboratory Infectious Waste Storage Area**

Comment: All references to 105 CMR 480.000 regulations should use the correct title: “Minimum Requirements for the Management of Medical or Biological Waste.”

Response: MassDEP has made the suggested changes.

- **CMR 16.03(3)(a)6 Municipal Food Material Collection Centers**

Comment: Recommend that small businesses and coops, as well as municipal food collection programs, be allowed to store small amounts of discarded food for short periods of time, either at department of public works yards or at private, pre-determined locations, until they collect enough to warrant shipment to a handling or processing facility.

Comment: Little risk is posed by small-scale, short-term storage associated with municipal food material collection activities and by small scale non-farm, non-residential composting.

Comment: The proposed regulations should provide a PBR that allows temporary storage of small amounts of food waste at private facilities in 64 gallon carts or dumpsters which would be similar to the exemption given to municipal food material collection so as to open up additional opportunities for collecting food waste from residences and small businesses.

Response: MassDEP has not made this change. Any group wanting to establish an area for businesses to collect source separated organics would need to obtain a RCC permit for the collection and storage of food material at private locations.

Comment: The proposed regulatory amendments provide exemptions for the temporary storage of organic materials (putrescibles) that are identified by MassDEP as more likely to cause an odor issue during composting. [The MA Executive Office of] Health and Human Services believes that the separation and temporary storage (under certain conditions) of these materials at homes,

institutions, and restaurants, as well as temporary storage facilities on municipal land, may indeed create odor nuisance and/or attract vectors. Vector control is at the core of disease prevention in public health.

Response: MassDEP believes the regulations as proposed addressed these concerns. The regulation includes requirements for municipal food material collection centers [310 CMR 16.03] which states that: the center accepts only food materials from residents of the municipality; the food material is stored in a container which is kept sealed when food material is not being added; no more than 1 ton of food material is collected per day and no more than 3 tons are on-site at any time; the food material is stored at the center and removed from the center in a manner that does not create nuisance conditions, such as, but not limited to, odors or vectors; in no case shall food material be on-site for more than seven days; and at least 30 days prior to commencement of operations, the owner or operator notifies the Department and the board of health, in writing, using a form provided by the Department.

- **CMR 16.03(3)(a)7 Storage and Processing, Wood Handling Activities**

Comment: Consider revising to include: “d. 310 CMR 16.03(a) through (c) shall not apply to clean wood that is: i. source separated, as defined in 310 CMR 16.02; and ii. processed by conversion, as defined in 310 CMR 16.02.”

Response: The exemptions for handling clean wood have been consolidated and simplified at 310 CMR 16.03(2)(c)7.

- **CMR 16.03(3)(a)10.g Cathode Ray Tubes (CRTs)**

Comment: The proposed threshold for accumulated non-commodity CRTs is too low. It should be more, perhaps 75 tons or even higher. The higher tonnage will allow operations to be more efficient and economical in getting these recovered items into reuse markets and to minimize trucking impacts.

Response: MassDEP is considering making changes to the CRT regulation in separate revisions to the hazardous waste regulations. Changes in how MassDEP regulates CRTs will be proposed at that time. Therefore, no changes were made to this section at this time.

- **CMR 16.03(3)(a)11 Activities located at an Agricultural Unit**

Comment: This section is not required, so long as a superiority clause is added to the regulations which states that in the case that this regulation conflicts with another regulation and/or statute, the regulation and/or statute that is the most restrictive shall take precedence.

Response: MassDEP believes this section is needed to clarify that activities located at a farm will be regulated by MA DAR, pursuant to their regulations.

Comment: “On farm” composting and anaerobic digestion should be exempt from MassDEP regulation, provided that those activities are appropriately regulated by MA DAR. The MA DAR regulations should not be so dissimilar that they create a competitive disadvantage to non-farm operations. That will only discourage investment and frustrate achievement of the solid waste plan’s goals. We hope that MassDEP will work closely with MA DAR to ensure regulatory consistency.

Response: MassDEP and MA DAR have worked to ensure that composting activities on farms are clearly regulated by MA DAR pursuant to their regulations and not MassDEP's regulations, as well as how non-complying composting operations will be managed.

- **CMR 16.03(3)(a)12 Composting Not at a Residence**

Comment: Expand the exemption to include 10 tons per day of produce organics; 5 tons per day of restaurant organics; and no limits on leaf, yard and agricultural organic wastes. This remains consistent with facilities that are currently registered with the MassDEP.

Response: No change was made to this section. The amounts proposed represent increased tonnage over the existing regulations. If an operator wants to compost a larger amount of material, it may obtain a general permit under 310 CMR 16.04 or apply for a RCC Permit under 310 CMR 16.05.

- **CMR 16.03(3)(a) Recycling**

Comment: Suggest the addition of single and dual-stream recycling to the list of recycling facility types. Single stream is a growing market and is encouraged by the State, and inclusion of this type of recycling facility under the Category 2 exemptions will help achieve this goal.

Response: Single and dual-stream recycling operations are covered by the general permit provisions at 16.04. Please note that the residual rates for recycling have been modified to allow for a higher percentage of residuals for single-stream recycling operations, based on current industry standards. Therefore, most of these operations are not expected to require site-specific RCC permits. MassDEP anticipates single stream processing technology to improve and intends to amend these regulations to lower the residual rate as industry performance improves.

310 CMR 16.04 – General Permit for Recycling, Composting or Aerobic and Anaerobic Digestion Operations

Note: In the final rule, the title “Permits by Rule” has been changed to “General Permits” and the term “Performance Standards” has been changed to “Requirements”

- **16.04**

Comment: We concur with MassDEP's proposal to exempt municipal food material collection activities from the site assignment requirements; composting at non-farm and non-residential locations of up to five tons and ten cubic yards of vegetative and food materials or animal manures; and MA DAR-regulated farm-based composting and other aerobic digestion activities. We also concur with MassDEP's proposal to make small windrow composting operations, as defined, eligible to obtain PBRs. We support MassDEP's determination that the MA DAR should regulate organics management on farms, and that farm-based projects not covered by MA DAR's program should seek PBRs or site-specific permitting from MassDEP, as appropriate.

Response: MassDEP appreciates the support of these revisions to the regulations.

Comment: “Digests” should replace “Converts” in this section and throughout the proposed regulations. AD should not be confused with high-heat technologies.

Response: While MassDEP expects that most “conversion” operations in the near future will involve aerobic and anaerobic digestion technology, MassDEP wants to leave the door open to considering new technologies that may provide more efficient and/or effective methods in the future for converting organic material into useful products, such as energy. Therefore, this change was not made.

Comment: The proposed rule would impose a PBR on numerous activities rather than a conditional exemption as currently exists under the regulations. There is concern that PBR facilities will be subject to permit challenges that may drag on for years. The use of conditional exemptions should not create the problem of legal challenges that a PBR may present.

Comment: The commenters have great concerns about the proposal to shift recycling activities from the conditional exemption category to the new PBR category. Any party claiming it is aggrieved will have an opportunity to appeal, whereas under current regulations no appeal rights exist, nor should they. Regulations should not seek to require solid waste permits for facilities that handle only materials that are not solid wastes.

Response: The title of the “Permit by Rule” has been changed to “General Permit.” A general permit is a permit that is established by regulation, not by an individual permit review process. MassDEP would not issue an individual permit document, and, therefore, there is no state agency action that triggers an adjudicatory appeal. Instead, the facility must submit an annual certification to MassDEP that its operation is in compliance with the general permit conditions set forth in the regulation.

Comment: We see no need to shift from DEP’s current methodology of using its DON procedures for such facilities to the proposed PBR process. The process works well to protect public health and safety and the environment, while allowing proponents a reasonable process to advance new programs and facilities. Such a change will trigger new review and appeal processes that will harm the development of new programs and facilities; and, will have the effect of treating recyclables as solid waste, which is not regulatory authority that is legislatively authorized for the DEP to do.

Response: MassDEP believes the new regulations will support the development of new programs and operations which handle recyclables and organic materials. As a result, some operations that would have previously required a DON would now be eligible for a general permit.

Comment: The Massachusetts Department of Public Health (MA DPH) supports MassDEP’s efforts to meet the solid waste master plan goals while protecting public health and the environment. However, it believes these goals should be balanced with the need for local public health and other input in order to best protect the residents of the Commonwealth ...Operations that would be eligible for PBR include recycling facilities (up to 250 tons per day), small windrow composting operations (maximum 50000 cubic yards or 10000 tons on site), and aerobic and anaerobic digestion facilities (up to 60 tons per day). MA DPH states that local health review would help to ensure that the facilities do not create problems.

Response: “General permit” (formerly PBR) status has been designed to apply to smaller facilities that have been exempt from site assignment under the DON procedure since MassDEP

established DONs in 1990. The only exception to this is that the maximum sizes of eligible operations will be increased somewhat and that there will be a new category for small AD facilities. AD facilities are required to have entirely enclosed systems and to make all deliveries through controlled and connected hose systems. Therefore, odor and vector issues will be minimal. In addition, all “general permit” operations will be required to establish and implement plans for controlling odors and dealing with vectors, no matter what types of areas they will be located in. Finally, the final rule will require these operations to have contingency plans that address failure or inadequacy of the required odor and vector control plans (i.e., what will the facility do when its odor control plan fails on a hot summer day?).

Comment: Performance standards are sufficient to insure conditionally exempt facilities remain out of the solid waste business and solely in the recycling, composting or diversion business.

Response: MassDEP appreciates the support for this approach.

- **16.04(1)(b) – Permits by Rule for Recycling Operations**

Comment: While the proposed regulations states that “The recyclable material is not contaminated by toxic substances....,” the definitions section does not define “toxic substances.”

Response: “Toxic substances” are defined by the language that follows this phrase, and include anything “which may pose a significant threat to public health, safety or the environment.”

Comment: DEP should make the following changes to the PBR category: 250 tons per day limit on recyclable materials should not apply to fiber materials, including all grades of paper and cardboard; and the residue limit should be set at 15% to accommodate single stream recycling facilities.

Comment: We strongly request the 250 tpd limit not include any kind of fiber and that the 10% residue limit not be adopted.

Comment: The proposed PBR and the 250 tpd limit for recycling operations will harm facilities enjoying these current exemptions, and it will impede future development of new recycling facilities. Recycling facilities with more than 250 tpd throughput, not including fiber, should be required to obtain a permit.

Response: Recyclable paper and cardboard has been explicitly excluded from the maximum tonnage limit for a recycling operation under a general permit. Also, the residue limit for single stream recycling operations was raised to 15% in response to comments that greater percentages of non-recyclables are included in single stream sources from generators.

- **16.04(1)(d) Permits by Rule for Recycling Operations**

Comment: Consider adding flexibility to the 250 tpd limit to account for seasonal and other factors. This could be done by allowing for a monthly or annual averaging of material with a daily limit of 500 tpd. This would allow more operations to take advantage of the PBR process.

Response: The tonnage limit is not a rolling average, and MassDEP has determined that an RCC permit should be required for higher tonnage operations.

Comment: The current 100 tpd limit on recycling is too low and the increase to 250 tpd is welcome but not sufficient particularly since this includes construction and demolition materials. The limit should be raised to 500 tpd for recyclable materials.

Response: The regulation requires operations that take in more than 250 tpd (not including paper) to obtain a site-specific RCC Permit. The Department believes that a site-specific permit for these larger operations will provide oversight that is necessary to assure the public that conditions have been established that will protect public health, safety, and the environment. Facilities that process/recycle construction and demolition debris are not exempt from site assignment, and will not qualify for a general permit under 310 CMR 16.00.

Comment: Current regulations exempt all paper handling and baling operations from solid waste site assignment and permitting, and this continues for facilities which only do paper handling and baling in the draft regulations (310 CMR 16.03(3)(b)4.). However, 310 CMR 16.04(1)(d) limits facilities that may take in recyclables other than paper as well as paper; the limit is 250 tpd and if this is exceeded a permit would be needed. This does not make sense. The recycling of paper should not be subject to solid waste regulation regardless of whether it is conducted at a site that performs other recycling activities.

Response: In the final rule, the limit on the amount of paper that can be accepted by all recycling operations has been removed.

- **16.04(1)(e) Permits by Rule for Recycling Operations**

Comment: Consider a higher residual amount to allow for more operations to take advantage of the PBR process.

Comment: The residue generation rate should not be reduced from 15% to 10% particularly since many communities are moving towards single stream recycling. It would not be possible to meet the 10% residual rate.

Comment: The processing residue limits should remain unchanged at 15%. The 10% threshold will negatively impair our facilities in diverting the maximum amount of materials into reuse or recycling programs. Municipalities may be one of our most severely affected customers.

Response: The residue generation rate for recycling in general will remain at 10%, but the residue generation rate for single stream recycling operations was raised to 15% rate (measured by weight).

Comment: If MassDEP chooses to proceed with these proposed changes, we believe they should then apply to new facilities. Facilities currently exempted should be extended special status as grandfathered facilities and not subject to the new regulations and threshold amounts.

Response: The revised regulation will apply to new and existing operations. The Transition Requirements for existing operations are at 310 CMR 16.01(12). Operations with an existing DON may continue to operate until the date of expiration of the DON or the date five years after the effective date of the regulations, whichever is sooner. Operations which will be subject to a general permit will be required to submit an annual certification on or before Feb. 15, 2014.

- **16.04(1)(f) – Permits by Rule for Recycling Operations**

Comment: It does not make sense for MassDEP to set a 180 day limit on the storage of recycling feedstock materials and call it speculative accumulation. The recycling business is wholly dependent on market demand. Market prices fluctuate quickly, and the small profit margins in which the recycling industry operates dictate that materials be held until it is profitable to sell them. Flexibility is needed and a recommendation that a one year holding period on 75% of the inventory if MassDEP believes that a maximum hold time is critical to its mission.

Response: The time period specified in this section for recycling operations has been increased to one year from the date of receipt of materials to provide flexibility for changing market conditions. The amount of material on site, whether in its as-received, in-process or processed condition, shall not exceed the amount of recyclable or organic material that can be received in one year.

- **16.04(2) – Permits by Rule for Operations that Transfer, Compost or Convert Source Separated Organic Materials.**

Comment: Because composting and conversion “operations” are in fact “solid waste disposal facilities,” MassDEP has no authority to grant an exemption from the site assignment requirements. Therefore, the exemption from a solid waste facility permit is no longer applicable as well.

Response: MassDEP disagrees that composting and conversion operations are solid waste disposal facilities. These facilities handle pre-sorted materials to create useful products such as compost or biogas whereas disposal facilities simply dispose of waste with no effort to reclaim them. Also, as discussed above, MassDEP has the authority to exempt these operations from site assignment.

Comment: No siting requirements are listed, except for the 250 foot setback from any existing private water supply well.

Response: Because the small RCC operations that are eligible for a general permit vary widely, MassDEP believes that the setback and other siting requirements that municipalities typically establish for industrial activities should apply to these operations. Therefore, MassDEP is not establishing any siting requirements except for the setback from existing water supply wells. In addition, this regulation does not change a municipality’s authority to regulate development and to establish conditions for hours of operation, traffic, setbacks from other properties through zoning, subdivision, and other municipal regulations.

Comment: What is the rationale for the limitation to no greater than 25% grass clippings by volume?

Response: Grass clippings are a putrescible material and can result in significant odors, if they are not mixed with sufficient non-putrescible materials.

Comment: “Digest” should replace “Convert.”

Response: While MassDEP expects that most “conversion” operations in the near future will involve aerobic and anaerobic digestion technology, MassDEP wants to leave the door open to considering new technologies that may provide more efficient and/or effective methods in the future for converting organic material into energy. Therefore, this change was not made.

Comment: This section, unlike 16.04(1)(b) for recycling, does not specify that the material is not contaminated by toxic substances. We are concerned about the toxicity of products labeled as “compost,” whether it is marketed or burned or used as landfill daily cover.

Comment: Concern that there are no specific requirements in place to ensure the quality of the pre-sorted materials that would feed a PBR composting operation, or that the final outgoing products are suitable for their intended purposes. For this reason, the proposal does not satisfy each of the basic principles identified by MassDEP.

Comment: Proposed performance standards do not seem sufficient to protect against toxicity. For example, MassDEP has proposed to amend the definitions to remove protections against contamination. Recommend that the MassDEP retain language in the definitions of “compostable material” and “recyclable material” requiring that such materials are “not contaminated by significant amounts of toxic substances.” 16.04(1)(h) only requires that the operation’s products be of sufficient quality to be “marketable” without requiring any protocols for testing or monitoring.

Comment: The general performance standard for PBR composting operations is too vague, and therefore provides neither adequate notice to operators of what is required, nor an enforceable standard. MassDEP should develop screening protocols for inputs, and DEP should adopt appropriate monitoring and reporting requirements for finished compost that is intended for sale, application in agriculture, or their distribution. Provisions should include representative sampling of finished product before sale/distribution, and independent analysis for, at a minimum, the following parameters: persistent pesticides, lead, invasive species, and bulk contaminants (e.g., glass plastics). Concerns are not hypothetical; there have been occasions when community gardens within the City of Boston rejected finished compost because of high lead levels. Solicit stakeholder input.

Comment: Support the requirement that all material generated off-site be delivered via sealed tanker using a direct connection to limit nuisance conditions. Recommend establishing monitoring, reporting and testing protocols for the inputs and final products for these facilities as well.

Response: In the final rule, Section 16.04(3)(a) requires that “the quality of organic materials is sufficient for the operation and that the quality of the operation’s products is sufficient for the products to be marketable” and “the organic material is not contaminated by toxic substances at levels which may pose a significant threat to public health, safety or the environment.” Source control (also referred to as input control) is the primary means of preventing toxics or other contamination from ending up in the products produced during composting or conversion of organic material. Source control encompasses the principals of limiting the types of material used and having knowledge of how the materials are generated or are otherwise handled prior to receipt at a composting or conversion operation. The regulations incorporate the concept of source control through a combination of definitions. The definition of organic material is limited to seven specific categories of material which are then separately defined. Each specific organic material category is limited to: (1) a material resulting from food production, food preparation and consumption; (2) virgin plant material (including yard waste & clean wood); or (3) a biodegradable product or paper. These sources by their nature have a low level of concern for contamination with “toxic substances.” Also, the regulations include the additional requirement

that only source separated (see definition) organic materials can be used in RCC activities which further reduces concerns regarding contamination.

Operations working under a general permit are required to establish specific plans to identify any toxics in their input material (through knowledge of the material's source or through testing), and to address situations where toxics are found in the input material or the outgoing product. Annual reporting will be required from all RCC operations (except for the very small sized and material specific composting activities allowed under 16.03) which will require identifying, among other things, the source of all organic materials received.

Comment: Specific performance standards proposed for PBR composting operation are sufficient to ensure proper compost management, assuming operators adhere to them.

Comment: To ensure the long term success of its efforts, MassDEP should consider implementing a regular inspection protocol for PBR composting facilities in the first years of the program. Swift and effective enforcement of any non-compliance with the performance standards will be important. Poor performance will set a bad precedent and good management will lead to broader acceptance.

Response: MassDEP is planning to conduct periodic random inspections of composting and conversion operations working under a general permit (in addition to targeted inspections based on complaints and other information that is available to MassDEP) to verify statements made in compliance certifications and to assess compliance with the requirements.

Comment: Suggest that any facility that takes in food waste (fish waste, restaurant waste, food process waste, etc.) needs to be permitted, regardless of volume taken in, except perhaps as described in our comments to section 16.04(3)(a)12. Regarding food material under a Conditional Exemption, Attachment A to our comments contains very specific operation and quality control procedures. Facilities that are to handle highly putrescible wastes for recycling, composting, conversion or diversion should be subject to permitting and should not be afforded a permit by rule pathway, other than the small scale operations earlier mentioned in these comments.

Response: The operations that will be allowed under a general permit are limited in the quantities of food waste that they can accept and are required to mix this material with other material quickly to prevent nuisances. MassDEP believes that the requirements established by the general permit provisions will be adequate to ensure that these operations will not present a risk to public health, safety or the environment.

- **16.04(2)(a)**

Comment: A number of requirements are vague and will likely be difficult for MassDEP to enforce. (a) states that "An operation ... meets general performance standards if it: 1. Meets all applicable performance standards." If what is intended is a reference to the specific performance standards that follow at (b) and (c), these should be referenced. MassDEP should reference 310 CMR 7.00 and clarify specifically whether anaerobic digestion for organic material requires plan approval under 310 CMR 7.00. MassDEP should articulate a performance standard for odors, and clarify whether the owner or operator will be required to submit an odor control plan to

MassDEP before construction or before it begins operation. MassDEP also should include provisions for reporting and managing compliance with the odor control plan, and a process for recording and managing odor complaints.

Response: The final rule contains more specific direction for facility owners and operations about the scope and detail of required plans for controlling nuisances such as odors [see 16.04(3)]. The need for air quality approval(s) will be determined by the specifics of each proposed operation.

- **16.04(2)(a)1.**

Comment: Add “the performance standards shall be based on existing, established operation of facilities of the same technology and volume. All differences with comparable facilities to be explained in the application.”

Response: An operation subject to 310 CMR 16.04 general permit provision will not submit an application but will initially certify that the operation is in compliance with 310 CMR 16.04 and all applicable requirements and will then certify to its compliance annually. Therefore the regulation has to be explicit about what the owner/operator is certifying to.

- **16.04(2)(a)14.**

Comment: Add “the applicants shall provide an Environmental Risk Assessment Report on any site specific environmental issue identified by the local board of health.”

Response: Operations working under a general permit will not have a pre-construction review by MassDEP or the BOH. If the operation meets the requirements for its facility type, it will be allowed be constructed once it has obtained local land use, zoning, and other applicable permits.

Comment: The 250 foot setback for compost facilities to private water supply wells should also be applied to anaerobic digestion facilities. Also, the 250 feet setback should also apply to surface water bodies such as, streams and rivers.

Response: The 250 foot setback for any existing water supply well in use at the time the operation commences was changed to apply to composting and aerobic/anaerobic digestion operations. This requirement has not been applied to surface water bodies.

- **16.04(2)(a)15.**

Comment: The residual content of 5% does not define whether it is volume or weight based and should be more clearly defined.

Response: The final rule clarifies that this will be a weight-based measurement.

Comment: The amount of residue allowed during anaerobic digestion should be increased from 5% to 10%.

- The section should be deleted and a new section should be added at 310 CMR 16.04(2)(b) as follows “The amount of residue generated by the operation does not average more than 5% of the weight of the material composted during any quarter.”
- Add a new section 310 CMR 16.04(2)(c) as follows “The amount of residue generated by the operation does not average more than 10% of the weight of the material converted during any quarter.”

Response: The suggested changes were not adopted in the final rule. MassDEP consulted with a number of proponents of anaerobic digestion operations, who indicated that a residue generation rate of 5% is currently achievable if it is measured by weight. If a digestion operation cannot meet this residue generation rate, then it would need to obtain an RCC permit.

- **16.04(2)(a)15. and 16.05(3)(e)**

Comment: These requirements impose an unrealistically low limit on residuals. The limit should be raised to 10-15%. While the 5% limit may be appropriate for green waste, most food waste currently available has somewhat higher contamination levels. Ideally, a 15% limit is reasonable today; a minimum of 10% residuals should be allowed. Further, the regulation does not specify how to calculate the percentage. We suggest that the method for calculating the percentage residuals be percentage by weight of total residuals divided by total incoming material.

Comment: The 5% limit on contamination of feedstock entering facilities is overly restrictive. 15% is a better place to start, perhaps declining over time as technology and source separation improves. We believe an emphasis should be put on regulating the end product in this regard to ensure protection of end-product quality.

Response: See above response. An operation that needs an RCC permit may persuade MassDEP to include a higher residue generation rate in the permit, based on information provided in the application.

- **16.04(2)(a)16.**

Comment: Proposal does not clearly indicate the permitting process for existing site-assigned facilities and should be clarified. Unclear how any composting or conversion facility that would otherwise meet the PBR requirements could operate at an existing site-assigned facility if that facility's site assignment does not already contemplate such activities. The requirement that the new activities be "in accordance" with the existing site assignment implies that the site assignment conditions would need to be amended to include the activities. However, this approach is at odds with the stated intention that MassDEP "would like to ensure that recycling, composting, and conversion operations proposed to be located on the site assigned property are subject to the same processes as similar operations that would be located on property that is not site assigned." The requirement to amend the site assignment imposes a higher burden. We agree with MassDEP's stated aim. Therefore, for PBRs, it should be sufficient that the proponent certify that the conversion activities "not adversely impact the solid waste management facility."

Response: The language regarding any RCC operation located at a solid waste facility has been clarified and moved to 310 CMR 16.01(11). However, the requirement for the operation to be consistent with the facility's solid waste site assignment is still applicable. If the activity is not allowed by the site assignment, the facility owner would need to apply to the BOH to have the site assignment modified as appropriate. MassDEP does not have authority to modify local site assignments.

- **16.04(2)(a)17.**

Comment: Add new section "copy of Environmental Impact Report [per MEPA] or written certificate from appropriate authorities that it is not required."

Response: The MEPA Office expects to begin a stakeholder process in 2013 to consider adopting minimum size thresholds for RCC operations that would require filing an Environmental Notification Form or an EIR before the operation can be constructed.

- **16.04(2)(a)18.** – Speculative Accumulation.

Comment: Because the processing operations described rely on biological activity to achieve proper treatment, and because their end use products have seasonal marketability, the speculative accumulation periods detailed are not realistic or practical. Request the period be increased from 180 to 720 days. This accounts for 6 months in process, 6 months curing, 6 months between market cycles and a 6 month active sales season. We also request the speculative accumulation period for AD be increased from 180 days to 420 days. This accounts for 60 days in process, 6 months between sales seasons and a 6 month sales season.

Comment: Imposes an unrealistically low presumption for “speculative accumulation” of residuals from organic materials. The standard must be made more realistic and flexible. The 180 day presumption is not appropriate for organics. Organic materials are typically received year round, while the market for compost and soil products is highly seasonal, the primary peak April-June and a secondary peak in the fall. Speculative accumulation is most appropriately controlled by tonnage or volume limitations tied to a site’s processing capacity.

Response: The time period specified in this section for composting or aerobic/anaerobic digestion operations has been increased to one year from the date of receipt of materials to provide flexibility for changing market conditions. The amount of material on site, whether in its as-received, in-process or processed condition, shall not exceed the amount of recyclable or organic material that can be received in one year.

- **16.04(2)(b)2., 3, and 4. and Table 1** – Recipe Prescriptions.

Comment: These sections attempt to proscribe what materials should go into the anaerobic digesters and how they should be used. This seems to run counter to the goal of encouraging organics diversion from landfilling, as it limits the materials that can be processed because they fall into the “wrong” category. Furthermore, it constrains innovation. We recommend that material requirements and categorizations in these sections and Table 1 be eliminated. Other protections are in place that require a facility to demonstrate that the feedstocks can be properly managed.

- **Comment:** 16.04(2)(b)4. & Table 1 should be deleted because of redundancy in the prior sections which include performance standards. The performance standards with 16.04(2)(b)4. & Table 1, taken together set a standard that is too high for the smaller PBR composting facilities.

Response: Table 1 and its associated requirements apply to windrow composting operations, not to aerobic or anaerobic digestion operations. MassDEP believes that these standards are necessary to ensure that putrescible material is mixed with enough non-putrescible material in windrow composting operations for efficient composting and minimization of nuisances. Operations that cannot comply with these standards can apply for a site-specific RCC Permit (under 310 CMR 16.05) and present other options for preventing nuisance conditions for MassDEP review.

- **16.04(2)(b)4.**

Comment: Change to “Group Two Materials....shall not be more than the amount approved by local BOH but in no case more than 25% of the total compost windrow mixture....”

Response: The BOH will not review plans for operations under the general permit. These operations will be established in accordance with the procedures in the regulation, and they must operate in accordance with the requirements of the general permit regulation.

- **16.04(2)(c)2.**

Comment: The 60 tpd limit is not practicable for commercial facilities and will discourage the development of commercial conversion operations. Limit should be increased to 250 tpd for commercial facilities as has been proposed for recycling facilities.

Comment: Consider raising the PBR standard for AD to 60 tpd of solid waste derived from organic materials, excluding manure or other agricultural materials from operations that are farm based. This may lead toward greater adoption by the agricultural community, meet minimum economy of scale requirements, and result in less confusion over how to “count” inputs. Furthermore, we suggest that site-assigned locations that otherwise meet the PBR standards should be subject to a less rigorous permitting pathway than new facilities on land that is not site assigned.

Comment: It appears that this subsection does not apply to POTWs, however, we offer the following brief comments. MassDEP should clarify whether the 60 tpd limit is an absolute daily limit. MassDEP is also encouraged to specify the basis for the tonnage limit – is it wet or dry? The restrictions to delivery by tanker trucks may imply an unintended prohibition on delivery to a facility by either rail or barge or other secure means.

Comment: Does not allow for sufficient flexibility to accommodate both current and future technologies. Is the 60 tpd limit appropriate? We think it is. Although arguments could be made for a higher limit, we recognize that MassDEP has an important role to play in assuring the public that facilities operating under its jurisdiction will do so safely, without risk to public health or the environment. It is not unreasonable for MassDEP to exercise closer scrutiny of proposed facilities that exceed a size range or use technologies with which MassDEP has little or no prior experience.

Comment: The 60 tpd limit will restrict PBRs to facilities that are unlikely to be economic without significant subsidies. Therefore, permit by rule facilities are unlikely to play a significant role in achieving the capacity increases targeted in the Solid Waste Master Plan. Nonetheless, MassDEP should proceed with carving out a PBR category as things could change over time.

Comment: Tonnage Limitations. Change to “The operation does not accept more than the amount approved by the local board of health, but in no case no more than 60 tons per day of organic material for digestion.”

Comment: Regulation should be rewritten to read “The operation does not accept more than 60 tons per day (maintained over a 90 day rolling average) of source separated organic material for digestion, not including agricultural materials.” As this is currently written, [the operation] would be limited to 60 tons per day limit of organic material, including agricultural material sourced from off-site. Agricultural material is not a solid waste and should be regulated by MA DAR. By including agricultural material in the tonnage limit for PBR facilities, MassDEP is discouraging agricultural digesters. It is requested that the 60 tpd is a rolling average as it is in AGreen’s permit.

Comment: The limit of 60 tpd of organic material for processing by anaerobic digestion facilities should be increased and that the limit for anaerobic digestion facilities be 250 tpd.

Comment: We request that agricultural materials be exempt from the 60 ton limit. This is lower than what is needed in this emerging market to make a commercial facility financially viable. Excluding agricultural materials from this tonnage cap may also encourage greater adoption by the agricultural community.

Comment: Large scale, commercial sized projects are generally reliant on 100 tons of organic material per day or greater to remain economically feasible. Although, the commenter realizes that the PBR category is not intended for commercial sized projects, it encourages MassDEP to increase the daily threshold for tonnage to incentivize larger facilities.

Response: The limit for aerobic and anaerobic digester projects has been raised to 100 tpd on a rolling monthly average basis. MassDEP believes this size of an operation is still a farm-based operation. Commercial size operations will need to apply for an RCC Permit. The 100 tpd limit applies to the combined total of materials from on-site or off-site and is based on the as received weight of the materials either wet or dry.

Comment: The Best Management Practices (BMPs) suggested provide adequate guidance for systems based on “wet” technologies, however the BMPs are lacking for systems based on “dry” technologies.

Response: Operations that cannot meet the requirements established for aerobic and anaerobic digestion under a general permit will need to obtain a site-specific RCC permit from MassDEP. MassDEP expects that most “dry” operations will need an RCC permit.

- **16.04(2)(c)3.**

Comment: The specific performance standards are not sufficiently broad to accommodate currently available technology. It is recommended that 310 CMR 16.04(2)(c)3. be deleted.

Response: Operations that cannot meet the specific requirements for a general permit may apply for a site-specific RCC permit.

- **16.04(2)(c)4.**

Comment: Regulation should be rewritten to read “All organic material is added to the digestion system or stored in a fully enclosed tank with odor controls within 24 hours of acceptance at the facility.” Material cannot be added to the active digestion system in one day, it is not practical.

Comment: Storage prior to digestion. This section requires clarification. 24 hrs is too limiting, especially if the term “active digestion system” excludes “fully enclosed tanks with odor controls.” We would recommend modifying this section to allow, for example, a 3 day buffer tank as part of an “active digestion system” as long as it was a “fully enclosed tank with odor control.”

Comment: This is overly restrictive because of the 24 hour condition.

Response: In the final rule, this provision has been revised to require that all material must either be added to the active digestion system by the end of the business day or be stored in fully enclosed trucks or vessels.

- **16.04(2)(e)1.**

Comment: Information on the products and residue produced. What if the applicant does not know how a product is used or that use may change over time.

Response: While it is unlikely that people will invest in the development of aerobic or anaerobic digestion operations without having a plan for using the system's products, this requirement will ensure that the products will have uses or markets and that plans are in place to dispose of any residue that cannot be used. The standard will also ensure that "products" will not accumulate at the operation's site, creating nuisances and encouraging vectors. At the same time, MassDEP recognizes that uses may change over time, but this standard requires that marketing of the products is part of the initial plan for the operation.

- **16.04(2)(c) – Specific Performance Standards for Aerobic and Anaerobic Digestion Operations.**

Comment: Anaerobic and aerobic digestion facilities are both "resource recovery facilities" and cannot be exempted from site assignment.

Response: MassDEP does not classify anaerobic and aerobic digestion operations as "resource recovery facilities." Anaerobic and aerobic digestion operations are conversion activities that use organic material to create useful products, such as biogas. M.G.L. c. 111, §§150A and 150A 1/2 grant MassDEP broad authority over solid waste facilities, including establishing exemptions from site assignment.

Comment: The wording must change to state that such operations (if permitted and properly site assigned) must meet the performance standards, along with any other performance standards listed in the permit or required by MassDEP or the BOH.

Response: MassDEP is exempting aerobic and anaerobic digestion operations from site assignment. If these operations meet the requirements established in this section, they would operate under a MassDEP general permit. MassDEP cannot enforce standards adopted by a BOH, and, therefore, it would not be appropriate to reference standards adopted by BOHs in a Department regulation.

Comment: While the general criteria that apply to both composting and digestion call for an "appropriate" number of "properly trained" personnel, these subjective terms have little value in regulations. Therefore this section should be more specific about adequate coverage by trained personnel because of the risks associated with methane and hydrogen sulfide, and potential threats to public health and safety.

Response: Due to the wide range of potential technologies and their requisite staffing requirements, MassDEP believes that a general requirement is more practical.

Comment: The language in the last sentence of the first section is vague and unclear as to which performance standards will apply. Use of the word "some" is inaccurate and injects an unnecessary measure of uncertainty about the technical limits applicable to a particular operation and leaves open the possibility that other performance standards could apply, that only an unidentified sub-set of the 6 articulated standards applies and that an Operation could, through lack of specificity, inadvertently find itself out of compliance with the appropriate performance standards. MassDEP should revise this language as follows:

The Department may, on an Operation-specific basis, prescribe additional performance standards as are determined to be necessary by the Department to prevent nuisance conditions, prevent unpermitted discharges, and produce a stable, mature, and usable final product. These performance standards include.....

Response: MassDEP agrees that the proposed language was vague, and has deleted the text introducing this section.

Comment: The list of performance standards is not exhaustive. “Specific Performance Standards” must be *specified*. Operators should not be held responsible for complying with unspecified standards that may be imposed at the whim of individual regulators.

Response: MassDEP has changed the term “Performance Standards” to “Requirements” therefore the new term is “Additional Requirements.” The requirements listed are the standards against which MassDEP will measure an operation’s compliance. While MassDEP may adopt guidance to address frequently asked questions about the requirements, a change to the requirements in the regulation would need to be adopted as a regulatory amendment. The requirements have been designed to provide some flexibility where possible to allow different types of operations to find their own efficient and effective ways to meet them.

- **16.04(2)(c)3. and 4.**

Comment: The overly prescriptive nature of these performance standards injects assumptions about the limitations of technology. They also will make it difficult, in the event of the introduction of new, more efficient technologies that those that are currently commercially available, to incorporate these technological advances without a rule change. Rather than dictating the specific type of technology or, in the case of durational limitations, the upward hourly limit, MassDEP should consider revising as suggested below:

- Add to 3. – “or other technology demonstrated to be equally effective at limiting nuisance conditions and deemed appropriate for such use by the Department.”
- Add to 4. – “the period of time within which the engineering controls used to limit nuisance conditions maintain effective controls, in compliance with all relevant requirements and performance standards. Delete “24 hours before added into the digestion system.”

Comment: Subsection (c)3. Requires that all material be delivered via sealed tanker trucks using a direct connection technology. First, any limitation on delivery of materials that requires a sealed or enclosed truck should be limited to putrescible materials. Digesters can accept non-putrescible materials and the delivery rules should be the same as for composting facilities.

Comment: (c)3. And (c)4. unrealistically presume that putrescible material will already be in a liquid or semi-liquid form. This frequently will *not* be the case depending on digester technology, pre-processing requirements, and hauling logistics. Liquefaction or slurrying before transport will in many cases be inefficient and uneconomic, so requiring it be done undermines the goal of increasing processing capacity.

Comment: The fundamental policy concern is ensuring minimal odor release during transport and delivery. It should be sufficient to specify that the putrescible material be delivered by “enclosed collection trucks” and transferred to the facility “by appropriate unloading means that

do not leak free liquid on roadways or pavement during unloading or otherwise create nuisance conditions.”

Response: If an operation cannot meet the requirements for a general permit, it can apply for a site-specific RCC Permit.

- **310 CMR 16.04(2)(c)5.**

Comment: Use of the word “disposal.” This section states that “All solid and liquid materials produced by digestion must be *disposed* of in accordance with all applicable regulations or receive a beneficial use determination from the Department or other appropriate approval from another state agency for its reuse.” This language implies that the resulting products are wastes until a BUD is applied for and approved. At the very least “disposed of” should be changed to “utilized or disposed of.”

Response: The word “disposed” has been changed to “managed” and is now found at 16.04(3)(a) in the final rule.

Comment: End Product Use. How exactly does MassDEP intend to regulate end products from digestion? Or will this be handled by MA DAR? This section leaves the door open to either and leaves the regulated community uncertain about how this material will be regulated. We strongly urge the State to consolidate regulation of products outside the solid waste regulations, and to focus on the characteristics and concerns related to testing of the end product, not the origin of the material.

Response: In 16.04(3)(a), and also in 16.05, is a requirement that says “ensure that all solid and liquid materials produced as a result of the operation are managed in accordance with all other applicable regulations and approvals, including but not limited to, a beneficial use determination.” Because of the wide range of products that could be produced by various composting or conversion technologies, and the even wider range of potential uses for such products, it is not possible for MassDEP to list all potentially applicable requirements. It will be the owner’s and operator’s responsibility to ensure any proposed uses are in compliance with all applicable requirements. The owner or operator can always contact MassDEP regarding the regulatory requirements for a specific product and its use. In addition, MassDEP may develop guidance covering this issue as resources permit.

- **16.04(3)(b)4. and 8. Inbound Tonnage Limits.**

Comment: The tonnage limits that apply to source separated organics (SSO) and the maximum tonnage allowed on site together mean that only 83 days of material would be allowed on site at the maximum reception rate allowed. This is not enough time to compost and sell the material, which means a permit by rule composting site will either accept much less than the maximum, or will stop receiving material for most of the year. Our experience shows that the 10,000 ton limit is too low as compared to the cubic yardage limit (50,000 yd³). Therefore, the tonnage limit should be raised to 25,000 tons at any one time to match the expected density of the compost. This would provide a facility 208 days of capacity allowed under the PBR, which in our experience is much more practical, and in line with the intent of the regulation.

Response: MassDEP agrees with this comment and has removed the 10,000 ton limit.

Comment: Throughout 16.00, feedstock receipt limits are expressed in tons per day. We request guidance to that compliance with daily tonnage limits would be determined on a weekly or monthly average. Operational flexibility is required.

Response: MassDEP believes that a specific maximum daily tonnage limit is needed for digestion operations (which are relatively new in the Commonwealth). However, for composting operations, the limit has been revised to specify a maximum of 105 tons per week and no more than 30 tons per day of Group 2 materials, as listed at Table 1 in 310 CMR 16.04, or other organic materials with less than 30:1 carbon to nitrogen ratio, which provides flexibility to accept material from full trucks but caps the amount received on a weekly basis.

- **310 CMR 16.04(3)(g)**

Comment: This section prohibits speculative accumulation, though does not include any presumptions when that might occur. MassDEP should clarify that it may set conditions to prevent speculative accumulation on a case-by-case basis, taking into account the facility's proposed operating and product marketing plans, processing capacity, and storage capacity.

Response: MassDEP will not set site-specific conditions for operations that qualify for a general permit. The limit on speculative accumulation proposed in the draft rule has been expanded to allow material to remain on site for up to one year from the date when the material arrived at the operation's site.

310 CMR 16.05 – Permits for Recycling, Composting or Conversion (RCC) Operations

- **16.05**

Comment: Site assignment is required pursuant to c.111, s.150A.

Response: The activities for which a site-specific RCC Permit may be granted are limited to those using only material that has been diverted from solid waste and is not considered solid waste when handled in compliance with the regulations. Since the operations are not processing solid waste, they are not solid waste management facilities and, therefore, are exempt from site assignment.

Comment: Facilities applying for a site-specific permit are to “incorporate best management practices,” but does not delineate what this means.

Response: MassDEP does not believe this term requires a definition. Typically, “best management practices” include the techniques found to be the most effective means to achieve an objective.

Comment: Proposed language does not clearly state MassDEP's intent that permits issued under 16.05 would be exempt from site assignment and permitting under 310 CMR 19.000. Suggested language: The recycling, composting and conversion of recyclables subject to permitting in this section does not require a site assignment or a solid waste management facility permit pursuant to 310 CMR 19.000 provided a permit is obtained for the operations as described in this section.

Response: This language has been added to a new “Applicability” section at 16.05(1).

Comment: We note that section 16.05 is wholly silent on the question of how facility-specific permits would fit at locations with an existing site assignment. 16.05(3) should clearly indicate that MassDEP would consider the conditions of an existing site assignment as part of the review criteria, but that an amendment of the site assignment would not otherwise be necessary. In such a circumstance, it would be reasonable to require an applicant to submit a letter from the BOH commenting on whether the proposed operation would adversely impact the existing facility.

Response: The language regarding the operation of any RCC operation located at a solid waste facility has been clarified and moved to 310 CMR 16.01(11). However, the requirement for the operation to be in compliance/accordance with the facility's solid waste site assignment is still applicable. If the activity is not allowed by the site assignment, the facility owner would need to apply to the BOH to have the site assignment modified as appropriate. MassDEP does not have authority to modify local site assignments.

Comment: The list of plans to be submitted does not include an analysis of the risk of explosion or leakage monitoring. Should also require an estimation of vehicular load and traffic impacts and exhaust mitigation strategies to minimize air pollution.

Response: Language has been added to 16.05(3) to require applicants to identify all potential adverse impacts and strategies for controlling them. These could include risks of explosion and releases to air, water and ground. Traffic issues are primarily a local issue; however, they could also be evaluated during MEPA review, if required.

Comment: Subsection (3)(b)5 mentions that feedstock contain the lowest possible amount of solid waste. This is a contradiction from the requirement that feedstock be free of contamination from solid waste. This implies that slight contamination from inorganic solid waste is acceptable, as long as it does not exceed an undefined maximum threshold.

Response: The limits on residuals have been designed to limit the amount of solid waste present in recyclable and organic material, and to distinguish this material from solid waste. MassDEP understands that a standard requiring that feedstock be free of all solid waste would not be achievable.

Comment: What does it mean for a site to be "appropriate?" Standards are needed for this criterion.

Response: MassDEP expects applicants to consider the type and size of operation they are proposing for a particular site and discuss issues such as the proximity of sensitive receptors, environmental and human, and present this information to it in a manner which addresses how the operation will not adversely affect those receptors.

Comment: Section should require periodic audits by an independent third party who is qualified to determine compliance with the site assignment and permit.

Response: MassDEP has not incorporated this requirement. Periodic third party inspections of operations and maintenance are currently required for most solid waste management facilities. Since operations that will receive RCC permits pursuant to 310 CMR 16.05 are not solid waste management facilities and are not expected to present the same potential risks as a solid waste management facility, MassDEP does not believe that a blanket requirement for third party

inspections is necessary at this time. However, a permit for an individual facility may include a third party inspection requirement.

Comment: the term “Conversion” is not appropriate here and should be replaced with “Anaerobic Digestion (AD).” Whereas AD is a low-heat pre-processing of organic material for composting, “conversion” includes high-heat processes that destroy feedstock that could otherwise be recycled or composted. In fact, since the Review Criteria at 16.05(3)(c) specify that the materials for the permitted process must “meet the definition of recyclable or compostable material,” to destroy such recyclable or compostable material for energy or fuel in a high-heat conversion process would be counter to the provisions of this section and the purpose of the regulation revisions.

Response: MassDEP has not made any change to the definition of conversion. This will allow MassDEP to evaluate a wide range of technologies including high heat technologies, such as gasification. In addition, conversion operations permitted under the final amendments are only allowed to utilize source separated organic material and, therefore, do not contradict MassDEP’s intent with respect to these revisions and promoting new technologies.

Comment: The term “source separated” should appear in the first several paragraphs of this section in conjunction with “pre-sorted” since this section applies to recycling, composting and conversion.

Response: This section refers to recyclable and organic material, both of which are defined in section 16.02. These definitions use the terms “pre-sorted” and “source separated” as appropriate, so this change is not needed in 16.05.

Comment: Neither the PBR or site specific permitted facilities will need a local, corresponding, site assignment that has traditionally accompanied such kinds of facilities. We are not sure the current language in this section will achieve this and request the MassDEP tighten it up to ensure it does.

Response: In the final rule, new “Applicability” sections in 16.04 and 16.05 have specifically exempted operations that qualify for a general permit or a site-specific RCC Permit from site assignment.

Comment: The 5% residue limit for conversion facilities, with the proposed methods for permittees to request and receive an exemption of this restrictive limit, are adequate and give MassDEP essential flexibility to permit based on industry standards or design limits of a technology.

Response: MassDEP appreciates the support for this approach.

Comment: The limits on co-location of other kinds of facilities at recycling, composting and conversion permit facilities may prove to be counterproductive and should not be adopted.

Response: The limits on co-locating RCC operations address locations for which a BOH has already issued a site assignment. These operations are allowed at such locations as long as they are consistent with the requirements of the site assignment and solid waste facility permit.

Comment: Proposed language about any modification of a new site specific permit is too broad. Limit the trigger for review to when something substantially different is proposed. Clarify when or what triggers a review and what does not trigger a review.

Response: MassDEP does not believe the proposed language is too broad and has not made this change.

Comment: 16.05 should provide specific guidance with regard to anaerobic digestion facilities, at least to the matters of odor control, management and utilization of methane gas, management of gas purification and wastes generated from purification systems, and provisions for managing excess or unsuitable gas.

Response: MassDEP does not intend to specify or favor one technology over another regarding odor control and management of methane gas; therefore, no change has been made.

Comment: Since the threshold for permitting under 16.05 is fairly high, MassDEP should consider (a) revising the process to be a site assignment as contemplated under the current regulations, or (b) revising the language of the MEPA regulations to make facilities subject to 16.05 require an EIR, as would be the case under current regulations.

Comment: The proposed permitting process would have MassDEP adjudicate issues of damage to the environment. This imposes a new and unfunded regulatory burden on MassDEP, as well as creating a new and unfamiliar process that will be burdensome to applicants and to citizen groups. MassDEP should consider staying within existing approval processes as much as possible, rather than creating new ones. The MEPA process is known and provides an adequate forum for addressing environmental impacts.

Response: The MEPA Office expects to begin a stakeholder process in 2013 to consider adopting minimum size thresholds for RCC operations that would require filing an Environmental Notification Form or an EIR before the operation can be constructed.

Comment: Although 16.05(2) provides that a copy of the permit application shall be submitted to the BOH and 16.05(5) provides for the BOH to receive a copy of the draft decision, there are no further provisions relative to BOH involvement. This is unwise, particularly when the same officials will be the first to be called in the event of nuisance conditions. It also is contrary to MGL c.111, s.143.

Response: MassDEP believes the conditions on RCC activities are sufficient to prevent nuisances. In addition, MassDEP does not have authority over BOHs and therefore cannot mandate participation by the BOHs in the permitting process. However, municipal officials can provide public comment on draft RCC permits, and MassDEP has added provisions to the Final Regulation allowing municipalities to request a public hearing on draft RCC permits and to request an adjudicatory hearing on the RCC permit once it is issued. These additional comment and participation opportunities will ensure that local municipal officials will have ample opportunity for input into the final conditions of any RCC permit.

Comment: There is no requirement that proponents of advanced technology facilities, specifically anaerobic digestion facilities, demonstrate experience in the design, construction and operation of such facilities. MassDEP's experience with AD facilities at wastewater treatment

plants demonstrates that these facilities require skill, training and experience to operate successfully. Without such requirements MassDEP will have little assurance that AD facilities will be technical or commercial success stories.

Comment: Because operation of an AD facility requires specialized knowledge, MassDEP should develop training criteria and a certification process for AD site operators, similar to those required for wastewater operators.

Response: MassDEP believes it requires significant resources to construct and operate an AD operation, and a failure of the AD digester is extremely expensive to correct. Therefore, the owner and operator have significant incentives to staff the operation appropriately, with trained staff. In addition, the requirement that an owner or operator must submit a certification to report in a detailed manner on compliance will ensure that skilled and experienced operators will be managing these facilities. Finally, large AD operations will require an individual permit, and MassDEP has the authority to impose requirements regarding operational training and staffing. Finally, MassDEP intends to work with regional and national organizations to determine whether an effort to develop national training standards for AD operations is appropriate at this time.

Comment: MassDEP should require worker safety procedures to be documented in the submitted Operations and Maintenance plans.

Response: MassDEP does not have authority to address worker safety, except as unsafe working conditions may result in harm to the environment.

- **16.05(1)**

Comment: If the definition of “Conversion” is not amended then clarification is needed on whether or not a facility that proposes to create a feedstock for an AD facility that is either located at a municipal wastewater treatment plant or out of state facility qualifies for this permit given that an out of state facility would not have a permit issued pursuant to 16.05.

Response: MassDEP has clarified that an operation that creates a feedstock from recyclable or organic materials will be eligible for an RCC permit at 310 CMR 16.05. Operations which are located out of state are not governed by MassDEP regulations. However, organic materials that are brought into Massachusetts for recycling, composting or conversion, regardless of the source of generation, are subject to all the applicable requirements of 310 CMR 16.00. Activities located at wastewater treatment plants are regulated by 314 CMR 12.00.

- **16.05(2)(b)2. and 3.**

Comment: Recommend that the chemical and physical characterization of the material be presented in all applications.

Response: MassDEP agrees with this comment and has revised the final rule to require any applicant for an RCC permit to submit the physical and chemical characterization of the material.

Comment: 16.05(2)(b)2. – The requirement to provide detailed information on the organic material may not be possible to meet and could result in the submittal of sensitive information requiring protection from disclosure. The wording should be changed to indicate that the information be based on an estimate of the organic material to be processed.

Comment: Regarding 16.05(2)(b) 2 and 3, there is no standard by which an applicant or a permit holder (in the case of a modification) will be able to anticipate MassDEP's requirements, as phrased here. Would this require the applicant to file new applications or modifications when a variation in attributes occurs, which would be common? This requirement could trigger questions concerning confidential business information. MassDEP should consider language that would establish a baseline of approved characteristics, either physical or chemical, and include with that a reasonable range of variation of feedstock materials that could be processed. As an illustration, MassDEP could require a percentage breakdown of feedstock sources; (e.g. 15% from supermarkets, 20% from restaurants, etc.).

Comment: The requirement to provide the sources of the organic material may change over time and not be possible to adequately keep the permit up to date. The wording should be changed to read "the total quantity of organic material to be processed and a general indication of the sources of that material; and."

Response: 310 CMR 16.05 is the section for issuing individual permits to RCC operations. The permitting covers a wide variety of operations with an array of technologies and inputs. In some instances a chemical and physical characterization may be very simple; however, MassDEP needs the ability to require a full characterization of a material to ensure that the composition of the material is known. MassDEP has required chemical and physical characterizations of input materials as part of the application submissions for many DONs and BUDs it currently reviews without significant hardship to the applicant. If there is information that an applicant considers confidential or proprietary the applicant may submit a confidential business information request as part of its permit application.

Comment: The term "source separated" should be used whenever pre-sorted is used.

Response: MassDEP has deleted many references to the terms source-separated and pre-sorted and, instead, included these in the definitions of recyclable and organic materials. In addition, the final rule requires, at 16.05(3)(a), that the applicant demonstrate the extent the materials have been separated from solid waste and whether the materials contain the lowest possible amount of solid waste.

- **16.05(2)(c)**

Comment: Recommend that the applicant also identify whether the site or any adjacent neighborhoods have been identified as environmental justice communities.

Response: MassDEP did not include this requirement. MassDEP follows the Environmental Justice Policy that has been adopted by the Executive Office of Energy and Environmental Affairs (EOEEA)², which provides agencies with flexibility to determine how to address the specific communications needs of various communities when considering applications for project approvals in Environmental Justice areas.

- **16.05(2)(c)**

²This policy is available at: <http://www.mass.gov/eea/grants-and-tech-assistance/environmental-justice-policy.html>.

Comment: The requirement for the submittal of an operation and maintenance plan is contained in two separate requirements 310 CMR 16.05(2)(d)3 and 310 CMR 16.05(2)(d)4 which indicates that a different plan be submitted for each. This should be changed to indicate that only one plan is needed.

Response: MassDEP agrees, and this change has been made in the final rule.

- **16.05(2)(e)**

Comment: Regulation should require a chemical and physical characterization of the end products, not just the solid waste and residues from the process.

Response: MassDEP has addressed this issue in the revised regulations at 310 CMR 16.05(2)(c)4.

Comment: There is concern about the requirement to document that markets or uses exist for the compost, recyclable materials or products. Given the relative lack of experience upon which to draw in the U.S. with new and emerging technology this requirement, as proposed, could be extremely difficult, if not impossible, to satisfy. MassDEP could better address the issues of sham recycling or artificial markets through other mechanisms. MassDEP should either eliminate this requirement or limit the requirement to a demonstration that markets exist within the global marketplace.

Response: MassDEP disagrees with this comment, and believes that documentation of markets or uses is a useful part of the application.

Comment: It is entirely appropriate and necessary to provide minimum standards for end product quality to ensure protection of human health and the environment, but the current regulatory framework must be clarified. It has become increasingly unclear how end products can be consistently regulated through the different Massachusetts rules. Is it MassDEP or MA DAR? Uncertainty will stifle investment and innovation. If destined for the soil in some way there should be one clear set of regulatory standards to meet basic concerns. It must be based on composition of the end-product and not the feedstock.

Comment: We believe that 310 CMR 32.00 is outdated and in dire need of revision – the contaminant limits are based on 40-year old science, many provisions are at odds with their counterpart federal rules, the stockpiling limitations are impractical and unenforceable. We strongly urge MassDEP to revisit 310 CMR 32.00 in concert with addressing the regulation of products from organic waste processing facilities.

Comment: Develop or reference a standard for compost products to ensure an insignificant level of toxicity, so that human exposure involves a negligible risk. Standards and testing protocols are necessary to ensure that (1) marketed products from composting or anaerobic digestion process are not toxic, and (2) that contaminated products are not destined to be burned in an incinerator or used as “landfill daily cover,” where they can become airborne.

Response: 16.04(3)(a) and 16.05 include a requirement that says “ensure that all solid and liquid materials produced as a result of the operation are managed in accordance with all other applicable regulations and approvals, including but not limited to, a beneficial use determination.” Because of the wide range of products that could be produced by various composting or conversion technologies, and the even wider range of potential uses for such

products, it is not possible for MassDEP to list all potentially applicable requirements. It will be the owner's and operator's responsibility to ensure any proposed uses are in compliance with all applicable requirements. The owner and operator can always contact MassDEP regarding the regulatory requirements for a specific product and its use. In addition, MassDEP may develop guidance covering this issue as resources permit.

- **16.05(2)(e)4.**

Comment: The requirement that the application provide information regarding the quantity and composition of residues produced should be clarified to indicate that estimates are sufficient.

Response: No change has been made. MassDEP disagrees with this comment.

- **16.05(3) – Review Criteria**

Comment: Recommend that an environmental justice component be added to ensure that MassDEP considers a facility's impacts and benefits in light of the existing environmental issues and health concerns within a community.

Response: MassDEP follows the Environmental Justice Policy that has been adopted by EOEEA (see footnote 2 above for citation), which provides agencies with flexibility to determine how to address the specific communications needs of various communities when considering applications for project approvals in Environmental Justice areas.

Comment: Recommend including a review of any other facilities owned by the applicant to evaluate their compliance record.

Response: MassDEP has reserved the right to require additional information in the permit review process for RCC permits, and the background and experience of facility owners and operators may be relevant to a final permit decision.

- **16.05(3)(a)4.**

Comment: This provision proposes to restrict MassDEP's ability to proceed with permitting until a MEPA certificate is issued. Clarify to state that MassDEP can proceed if a final certificate has been issued, *if such a certificate is required*. If no certificate is required, MassDEP can proceed with permitting.

Response: MassDEP has made this change.

- **16.05(3)(b)5. and (e)**

Comment: [These sections] set conflicting and too rigid standards for contamination. Should be combined and clarified. Subsection (b)5. Requires that the organic materials be pre-sorted, source-separated and "contain the lowest possible amount of solid waste." Subsection (e) then goes on to set numerical standards. Is (e) meant to provide guidelines for implementation of (b)5? The term "lowest possible amount" is vague. We suggest combining the two sections with the review criterion set as "minimizing the amount of solid waste."

Comment: Provision proposes to require that materials "contain the lowest possible amount of solid waste." Believe this language is too broad and unduly restrictive. Further, there is no reason for a solid waste restriction because MassDEP already addresses incoming composition concerns by imposing a residuals limit. Redundant and confusing.

Response: The limits on residuals have been designed to limit the amount of solid waste present in recyclable and organic material, and to distinguish this material from solid waste. MassDEP understands that a standard requiring that feedstock be free of all solid waste would not be achievable.

Comment: Residue limit should be set at 15%, rather than 10%, to accommodate single stream facilities.

Response: MassDEP agrees and has established a residue limit of 15% for a single stream recycling operation in the final regulation.

Comment: DEP has appropriately provided a placeholder for the advancement of technology. Language may be strengthened by addition of a subset (c) that says, “The technology and controls are appropriately designed for the effective separation of residual materials where an industry average is not attainable.”

Response: MassDEP disagrees that such language would strengthen the control over residual generation.

- **16.05(3)(e)4.a.**

Comment: What is the meaning of “industry average” when the industry is in its nascent stages in the U.S. and does not yet exist in any significant way in Massachusetts? The standard must be available, credible, and relevant to compliance by a permitted facility with the performance standards appropriate to that facility. MassDEP must either establish parameters or expressly provide that the “industry average” contemplated by this proposed language may be satisfied by analogy to the global marketplace where such documentation may exist.

Response: The final rule does not indicate that the industry average is limited to a particular location.

Comment: Postponing review of a permit application following a determination of administrative completeness does a disservice to both the stated intent to promote the development of new conversion operations and is inconsistent with the Commissioner’s plan to promote efficiency and decrease processing periods for permits. In fact, MassDEP’s commencing of Technical Review 1 may well inform the MEPA process. Change Technical Review 1 to Technical Review 2.

Response: The final regulation makes it clear that the technical review can begin, but not be completed, until the MEPA process is final.

- **16.05(3)(e)1-4.**

Comment: There is concern about the upper thresholds to qualify for individual permits, 10% for recycling and 5% for C&D, is too low. Also, there is an objection that the recyclables must be separated from solid waste “to the maximum extent possible” and must contain “the lowest possible amount of solid waste.” These are absolutes and do not take into account feasibility, practicality, or cost, and they are duplicative. MassDEP should use language that is much less rigid such as, “the recyclables have been separated from the solid waste to the extent reasonably feasible.”

Comment: Wording should be changed to “---% for compostable *or digestible* materials.” It is unclear how exactly the percentage is to be measured. Finally, we believe 5% is much too stringent.

Comment: The specific permit requirement for the generation of residues by anaerobic digestion facilities is inconsistent with limits imposed on recycling facilities and is set too low. Further, a residual percentage based on volume will be difficult if not impossible for anaerobic digestion facilities.

Comment: The proposal establishes maximum amounts of allowable residues from recycling, composting or conversion facilities. For example, a maximum of 5% residuals is set for the processing of compostable material. Commenter recommends that a provision be added to this section to allow for higher percentages upon review and approval by MassDEP. Since a source-specific application and review is required under 16.05, and applicant should have an opportunity to justify a higher percentage, and MassDEP should at least have the authority to approve it. “Industry average” would not be relevant if an applicant is proposing a relatively new technology.

Comment: Wastewater plants would not be able to meet the 5% residual goal if water is considered. The DON for the proposed project at Covanta’s Rochester facility, even with water reuse, allows up to 12% residuals.

Response: The suggested changes were not adopted in the final rule. MassDEP consulted with a number of proponents of AD operations who indicated that a residue generation rate of 5% is currently achievable if it is measured by weight. If a digestion operation cannot meet this residue generation rate, then it would need to apply for an RCC permit.

Comment: MassDEP required a fats oil and grease (FOG) project to obtain a reclaimed water permit, even though the by-product water was already regulated under existing air and water permit approvals. Now Covanta’s FOG process will be regulated by 5 permits. This is needlessly duplicative and costly. Covanta suggests that projects subject to 310 CMR 16.05 be exempt from the need to obtain a reclaimed water permit if handling of by-product water is already adequately regulated under other permits or approvals.

Response: MassDEP disagrees that RCC operations should be exempt from the requirement to obtain reclaimed water permits.

- **16.05(4)(a) – Permit Conditions**

Comment: MassDEP should refrain from restrictions on the co-location of such facilities. Co-location may be critical to the economic viability of a facility.

Response: This language was not intended to restrict the location of RCC operations. The provision has been deleted.

- **16.05(4)(i) – Financial Assurance**

Comment: The inclusion, even as a discretionary condition of a financial assurance requirement (FAM), applicable to a conversion operation, is inconsistent with MassDEP’s intent to provide a clear, simple, and efficient path for the permitting of operations that will significantly reduce the volume of organic materials. This will undercut development and expansion of such operations and inject a measure of financial uncertainty. Such requirement does not exist under the current DON regulations. FAMs are applicable to solid waste facilities. Applying a FAM to a non-solid

waste facility is inconsistent with encouraging conversion operations. If MassDEP determines, based on a specific analysis, that a FAM is necessary, that conclusion should be founded upon the facts and circumstances of that particular operation, and MassDEP should provide a written determination of basis for such conclusion.

Response: MassDEP has required FAMs for an anaerobic digestion operation in the past, and this did not affect the financial viability of the project. Instead, FAMs have provided protection against potential threats to the public health, safety and the environment in the event such operations became financially insolvent and could not remove large amounts of organic material. MassDEP will review all relevant factors in a particular application prior to imposing FAM requirements.

- **16.05(4)(j)**

Comment: Add “Consent to the right of the Department and the local board of health without prior notice to periodically enter upon and inspect the property...”

Response: MassDEP has added a section related to providing access to operations for MassDEP and its representatives. MassDEP cannot confer access authority on boards of health.

- **16.05(5) – Public Review of Permit – Length of Comment Period**

Comment: (b) - A comment period of 30 days can possibly be acceptable in order to expedite permitting, but a comment period of 60 days is ideal.

Comment: Recommend that in addition to the public notice requirements in the proposed regulations, the public comment period should be extended from 30 days to 60 days. These operations are complex and the public may need time to engage experts to review applications or meet with the applicant and the MassDEP to fully understand the implications of the project. Additional time may allow for resolution of issues. Especially important to ensure that groups of ten persons have sufficient time to form and provide comments during this period to preserve their statutory right to intervene and appeal. Support MassDEP’s recognition of the rights of ten person groups to request adjudicatory hearings.

Response: MassDEP believes 30 days strikes the right balance between providing an opportunity to comment and not overburdening the applicant.

- **16.05(5)(c) & 16.06(6) – Intervention by Group of Ten Persons**

Comment: The provision for interventions by groups of ten would be a disincentive because it could delay the permitting process.

Response: Intervention is allowed by statute pursuant to M.G.L. c.30A, §10A.

Comment: Regulation should also require that such group must provide a simultaneous copy of the notice to the permit applicant.

Comment: The provision for interventions by groups of ten would be a disincentive because it could delay the permitting process.

Response: Comments submitted by a ten person group will become part of the public record just like any other comments, which the applicant may review. It is MassDEP’s understanding that intervention of a ten person groups must be allowed by M.G.L. c. 30A, §10A.

- **16.05(5)(d) -- Right of Municipality to Request Public Hearing**
Comment: Add “the right for the local board of health to request a public hearing.”
Comment: (d) states that a public hearing MAY be scheduled if the APPLICANT requests or the COMMISSIONER determines that there is sufficient public interest. Should include the BOH and/or any other appropriate political subdivision able to request a public hearing.
Response: MassDEP agrees with this comment, and the final rule allows the municipality to request a public hearing on the draft RCC permit.
- **16.05(5)(d) -- Environmental Justice**
Comment: A public hearing should be required to be held if located in an area designated as an Environmental Justice area by EPA or EOEEA.
Response: MassDEP follows the Environmental Justice Policy that has been adopted by EOEEA (see footnote 2 for the citation), which provides agencies with flexibility to determine how to address the specific communications needs of various communities when considering applications for project approvals in Environmental Justice areas.
- **16.05(5)(d) -- Public Comment Draft of Permit**
Comment: Suggest that all portions of the application be provided in electronic format so that they may be readily accessible to the public for review. This will reduce the need for staff time to respond to record requests, as well as reduce copying costs and travel costs for the public.
Response: To the extent that MassDEP’s information technology resources permit, MassDEP will make applications and determinations available to the public in electronic form.
- **16.05(5)(e) -- Effect of Public Hearing on Comment Period**
Comment: Add “A public hearing shall extend the comment period. The Department shall reissue a draft permit in response to public hearing comments. A new 30 day comment period shall commence after reissuing a draft permit.”
Comment: MassDEP should require a public hearing, continue such public hearing as required to address issues, and provide for the permit to be issued 30 days after the close of the public hearing(s), as is currently the practice for conservation commissions.
Response: MassDEP disagrees that it is a judicious use of public resources to require an additional draft permit for review or to provide a public hearing in all circumstances. The final regulation provides that a permit decision will be issued no sooner than 30 days after the close of the public hearing. An adjudicatory hearing process is provided, if necessary, after issuance of the RCC permit decision to resolve remaining disagreements of the parties.
- **16.05(6)(a) – Right of Municipality to Request Adjudicatory Hearing**
Comment: Add “local board of health as party with right to adjudicatory hearing.”
Comment: The BOH or the municipality should be added as persons who have a right to request an adjudicatory hearing.
Response: MassDEP agrees with the comment. The final rule allows the municipality in which the RCC operation would be located to request an adjudicatory hearing.
- **16.5(6)(c)**

Comment: Request MassDEP limit a person's right to request a hearing or to be heard on only those issues he or she raised during public comments.

Comment:

- Limiting matters that can be raised in a request for an adjudicatory hearing to those that were raised during the public comment period is unfair. Very likely something could be overlooked if comment period is only 30 days.
- To further streamline appeals, DEP should limit a person to raising only those issues that the person himself/herself/itself identified during the public comment period.

Response: The matters that may be raised in a request for an adjudicatory hearing by a person who has the right to request an adjudicatory hearing or by an intervener are limited to the matters raised during the public comment period. The purpose of this provision is to provide an incentive to all parties to raise issues early so that they can be resolved and addressed as part of the final terms and conditions of the RCC permit. In addition, parties may raise new issues if they can show that it was not reasonably possible with due diligence to have raised such matter during the public comment process or for good cause shown.

- **16.05(6)(d) – Request of Adjudicatory Hearing of the Department's Permit Decision.**

Comment: Ten person groups should notice the project proponent when they notice MassDEP.

Comment: We believe this provision should also require that a copy be sent to the permit applicant.

Response: In the final rule, the person requesting the adjudicatory hearing must send a copy of the request for adjudicatory hearing by first class mail or hand delivery, to the applicant and to any person who has submitted an electronic or mailing address with timely written comments to MassDEP.

- **16.05(7)**

Comment: Presumably changes that are less than significant will not require permit modifications. The language in the rule should state this explicitly.

Comment: (7)(a)2. – Proposed rule suggests that a permit modification would be required if “design and/or management of the operation is to be altered.” Statement is too broad and should be qualified similar to (7)(a)1.

Response: 16.05(7) requires a project proponent to notify MassDEP of the listed changes in at the operation so that MassDEP can determine which changes are significant enough to warrant a formal application for a permit modification. The Department does not anticipate requiring permit modifications for insignificant changes.

Comment: (7)(b) and (c) – Request that DEP use the term “modification” in both sections to make it clear that the modifications addressed in subsection (b) are the same that are contemplated in subsection (c).

Response: MassDEP used the different terms intentionally to require notice of the listed changes so that MassDEP could exercise its discretion to determine which changes require a permit modification.

- **16.05(8)**

Comment: Add “the Department and the local board of health (concurrent jurisdiction) may approve project to demonstrate innovative....”

Comment: Add “The Department, at its discretion, or if requested by the local board of health, will follow the procedure described....” Note: MassDEP may tailor the procedures consistent with the size and scope of the project.

Response: MassDEP does not agree that BOHs have concurrent jurisdiction over RCC permit review since RCC operations are not solid waste management facilities.

310 CMR 16.06 - General Requirements for General Permits and Recycling, Composting and Conversion Permits

- **16.06(1)(a)**

Comment: The proposed requirement to submit a compliance certification by a certain date should state that the certification will be submitted *annually, by no later than* February 15. As currently drafted, the requirement would be to submit the certification on *every* February 15, which suggests it must be submitted on that exact date.

Comment: We believe MassDEP should allow certification dates to float and not be required on a certain date.

Response: The language has been changed to “on or before February 15th.”

- **16.06(1)(b)**

Comment: The proposed requirement to certify should be clarified to indicate that MassDEP’s form will address compliance with the performance standards *applicable to the facility as set forth in 310 CMR 16.00*. While we fully support the concept of voluntary disclosure of issues to MassDEP, we do not believe that language requiring “a commitment to identify.... any violations that occur” is appropriate in a certification. No reason why facilities that are subject to reduced permitting requirements should be subject to stricter disclosure requirements than facilities that are subject to more robust permitting under other MassDEP programs. A certification is designed to attest to current knowledge of particular facts. It is not appropriate to expose individuals providing certifications to the potential for future liability on the bases of an advance statement of what will occur in the future. There is no current requirement in MassDEP’s solid waste statute or regulations to disclose every violation that may occur. For these reasons we request that MassDEP delete the proposed language seeking to require a commitment to identify any violations that occur.

Response: MassDEP disagrees with this comment. This language has been used in other MassDEP programs that require certification which MassDEP believes is appropriate here; therefore no change has been made in response to this comment.

- **16.06(2)**

Comment: We believe that the language seeking to establish a burden on the facility owner and operator *in every proceeding* to establish there is no nuisance or threat to public health, safety or the environment, should be removed.

Response: The burden of proof provision has been moved from 310 CMR 16.02 to 16.01, and it has been modified to require proof of significant threats to public health, safety or the

environment. The owner and operator have the information and the responsibility to demonstrate that the RCC operation will not cause a nuisance or significant threat. Similar language has been used in the solid waste facility regulations and other MassDEP programs.

- **16.06(3) – General Requirements for Recycling, Composting and Conversion Permits by Rule, Access.**

Comment: This section should also grant the BOH the right to enter upon the site and inspect it in order to determine compliance with the regulations.

Comment: Add “The owner and operator of any operation which qualifies for a permit pursuant to 310 CMR 16.04 and 16.05 shall allow the Department and the local board of health to enter upon.....and compel compliance with applicable regulation and the conditions of any permit issued pursuant to 310 CMR 16.04 and 16.05.”

Response: MassDEP does not have authority to grant access to BOHs, and therefore did not make this change.

Comment: There should not be a requirement in certifications requiring the identification of violations that have occurred or might occur. Standard will be unworkable and will be counterproductive to getting these kinds of facilities built and operating.

Response: MassDEP has reviewed the final rule, and it does not contain language requiring an owner or operator to identify violations that might occur. An owner or operator is required to identify past violations and to file a return to compliance plan if appropriate.

Concerns Expressed About an Existing Facility

Comment: Concern that a project of this size (Farmer’s Friend composting operation at NESFI) is allowed so close to private residents when organic material – most specifically food and proteins are exposed.

Response: The Farmer’s Friend composting operation is located adjacent to a capped landfill on state hospital land in the Town of Belchertown. Abutters are located approximately 800 to 1000 feet from the compost site. The operation as it currently exists would meet the tonnage requirements to operate under a general permit for composting. No change has been made in the final regulation.

Comment: The site already has nuisance odors at least 3 days per week. Who will make sure that the facility will be in compliance with limits on amount of materials and notification of the BOH stated in the regulations?

Response: The operation is required to maintain accurate records, and the owner/operator must annually submit these records with a certification to MassDEP. These records shall include the amounts and types of organic materials used and the amount of residual material sent for disposal. Notification to the BOH is not required. Failure to submit a certification or comply with any applicable requirement could result in enforcement by MassDEP.

Comment: Project does not source separate until the end when the final product is ready. Shouldn’t there be regulations requiring source separation in the initial stages?

Response: Based on MassDEP inspections the operation receives source separated organic materials from several sources, such as supermarkets and universities. Although the organic material is source separated there is the potential for small amounts of contamination from such items as plastic bags, silverware, paper, etc. MassDEP anticipates small amounts of physical contamination but places a limit of 5% contamination by weight for composting.

Comment: A strict policy should be in place with compliance requirements that are MORE than just once per year. Who checks to make sure they filled out MassDEP's compliance sheet accurately?

Response: Any operation which composts organic materials is expected to maintain compliance with all appropriate requirements of the regulations. MassDEP believes that annual certification with the compliance requirements is an appropriate reporting period.

Comment: The proposed regulations state that there needs to be access to an adequate water supply, which is not present at this operation. What is in place to prevent spontaneous combustion, vectors, and pathogens? Will existing operations be held to these new standards/regulations?

Response: Access to an adequate water supply may be as simple as having access to a town fire department. Occurrences of spontaneous combustion, vectors, and pathogens can be controlled by active maintenance of the operation, such as acceptance of proper incoming materials, proper turning of windrows (which regulate heat, moisture, and aeration), and proper adherence to compost recipes that maintain a 30:1 carbon:nitrogen ratio. All existing operations will be subject to the new regulations as addressed by the transition provisions.

Comment: What does an odor control plan consist of?

Response: The odor control plan requirements for general permit operations are detailed in 310 CMR 16.04(3)(a).

MassDEP received a number of comments and suggestions relating to typographical and grammatical errors. These errors have been corrected in the final rule and are not included in this response document.

310 CMR 19.000 - General Comments

Comment: In the interest of transparency, MassDEP should revise 310 CMR 19.002 and 19.003 to reflect the proposed exemptions. The proposed changes to selected definitions to reclassify certain waste materials as "non-wastes" have the effect of exempting composting facilities and digestion facilities from the reach of this regulation. It appears that the intent of the revisions is to instead regulate them under the site assignment regulations. MassDEP should clarify how it proposes to address the potential for pollution from composting and digestions facilities, and how the proposed revision to the site assignment regulations provides an adequate substitute for regulation under 310 CMR 19.000.

Comment: The public hearing draft provides only changes to certain definitions. This approach has the effect of masking what are actually profound changes to the way that certain materials currently classified as wastes would be regulated in Massachusetts. MassDEP should identify

how these changed definitions change their operation and effect of the solid waste management regulations and whether and how these materials will be adequately regulated under other programs.

Comment: MassDEP should clarify how the proposed definition changes serve the purpose of the regulation. This is particularly important since the definition changes reclassify significant streams of currently regulated refuse materials in a manner that would remove them from regulation.

Response: Facilities handling these materials were regulated under the previous regulations at 310 CMR 16.05, which exempted many recycling and composting operations from site assignment. MassDEP has revised 310 CMR 16.00 to broaden these exemptions from site assignment to include conversion of organic material, primarily in aerobic and anaerobic digestion operations, and to clarify which operations qualify for the conditional exemptions in 310 CMR 16.03 and which operations would fall under the requirements for a general permit in 310 CMR 16.04 or RCC Permit in 310 CMR 16.05. RCC operations will not require a solid waste facility permit, and, therefore, extensive amendments to 310 CMR 19.000 are not required. MassDEP proposed only those changes to 310 CMR 19.000 that are required for consistency purposes.

310 CMR 19.006 – Definitions Note: In this section, comments are noted by designating the definition in question followed by MassDEP’s response.

Agricultural Waste – reclassifies essentially all agricultural materials as “not waste,” regardless of their usefulness or characteristics. This definition is overly broad, as it includes organic materials “produced from ... processing of plants and animals,” regardless of the nature of the processing or where this processing takes place. Simply removing the word “discarded” does not alter the facility that such materials remain wastes from the perspective of the processor and should continue to be regulated as such.

Response: These materials are not waste. For years, facilities have used these materials on-site or shipped them off-site for processing.

Clean Wood - The term “CCA” should be included in the reference for chemical preservative in the definition.

Response: MassDEP agrees with this comment, and the final rule includes this change.

Recyclable Material - Should clarify the effect of the distinction between “recyclable material” and “organic materials that will be composted or converted.” Is the intent to avoid classification of composted materials as solid waste under 40 CFR 261.2(e)(2)(i)? “(2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraphs (e)(1)(i) through (iii) of this section): (i) Materials used in a manner constituting disposal, or used to produce products that are applied to the land;...”

Response: “Recyclable material” and “organic material” are defined differently, because the operations that manage these two different materials require different operational requirements. “Organic materials” are more likely to create risks of odor, vector and other nuisance concerns if not handled in accordance with the best management practices needed to prevent such problems. “Recyclable materials” are defined to include only more inert materials, such as paper, cardboard

and containers that do not require the same precautions to prevent odor, vector and other nuisance issues. Regulated parties who are concerned about the applicability of federal solid waste regulations need to refer to the federal regulations and U.S. EPA guidance to resolve those federal regulatory questions.

Solid Waste – The definition at (i) references pre-sorted materials at 16.03 and 16.04, but fails to incorporate the feedstock applicable to 16.05 and 16.06 as excluded from the definition of solid waste. Add “310 CMR 16.05 and 310 CMR 16.06” to the definition.

Response: MassDEP has added a reference to 16.05 to the final rule to reflect this comment, but a reference to 16.06 is not needed, because this is a procedural section relative to certifications.

Solid Waste – Inconsistent with the definition provided in 310 CMR 7.00, Air Pollution Control.

Response: The Air Pollution Control regulations define solid waste to address municipal waste combustors and do not need the additional detail for solid waste facilities for the purpose of those regulations.

314 CMR 12.00

Comment: The land application of sludge and septage regulations (310 CMR 32.00) are outdated. The current standards create a barrier to marketing products in other states. Our standards should be consistent with those of nearby states.

Response: MassDEP has no plans to amend the regulations at 310 CMR 32.00 as part of these changes focused on anaerobic digesters. MassDEP will consider evaluating them for needed updates – but that will happen after these changes are made. The Massachusetts definition of sludge is similar to those of the other New England states. Those other states also allow the introduction of other feedstock to sludge and septage treatment processes for beneficial reuse, such as composting. The proposed changes to 314 CMR 12.00 address that by allowing anaerobic digesters to accept source separated organics.

Although the comment did not specify which standards are considered outdated or problematic, the comment may have been a reference to the Massachusetts standard for molybdenum. The national standard for the heavy metal molybdenum is 75 mg/kg, and MassDEP’s standard is more restrictive. For Type I sludge, the Massachusetts standards are 10 mg/kg when land applied to land utilized for grazing or forage, and 25 mg/kg otherwise. Most if not all regulated facilities in Massachusetts can meet those standards, with the exception of the Massachusetts Water Resource Authority.

Comment: A number of people suggested that a uniform set of standards should be created for the products of composting. The different standards for BUDs, the standards in 310 CMR 32.00 for land application of sludge and septage, the agricultural standards for soil amendments or fertilizers, and mixtures of the products of some of these processes, have in some cases raised questions of which standard should apply. The commenters suggest developing a single uniform

set of standards for these products (or byproducts) from anaerobic digesters as well as other composting processes.

Response: A single set of uniform standards could be created for similar products, but developing such standards would be a large undertaking that would have to involve MassDEP's Bureau of Resource Protection and Waste Prevention as well as MA DAR. A thorough analysis of the statutory authority and purpose for each agency to regulate products in its purview would have to be undertaken, along with a substantial technical review of the standards. MassDEP is not able to undertake this project immediately as part of these regulatory changes but will consider these suggestions for future changes.

Comment: Where does the digestate (liquid by product of the digestion process) go?

Response: Digestate typically is introduced into the headworks of the wastewater treatment plant for additional treatment. For stand-alone anaerobic digestion facilities, it would most likely be transported to a wastewater treatment plant either by sewer or by truck.

Comment: Disposing of digestate with high nutrient content may be problematic for some sewer systems/ treatment plants.

Response: The organic and nutrient load associated with digestate would have to be factored into the design criteria and treatment provided by the wastewater treatment plant. It is possible that a plant could require some modification in order to accept the digestate and adequately address the additional nutrient content of the waste stream.

Comment: Why has MassDEP proposed to limit the types of materials able to be added to a digester in 12.03(13), and instead proposed to allow those materials with the required "prior written approval" for new material introduction.

Response: Certain types of materials (fish waste, animal material from slaughterhouses etc.) were initially excluded from the organic materials that could be added to a digester, because they take too long to break down and are not amenable to anaerobic digestion. These kinds of materials are more likely to upset the digester's biological process.

Based on the comments received and further consideration, MassDEP modified this provision to eliminate the outright ban on fish waste/animal material from slaughterhouses and other sources. These materials will not be allowed to be introduced into an anaerobic digester without specific approval of the materials from MassDEP. Approvals will be contingent upon the applicant's willingness to accept the materials, their quantity, the ratio of the animal products to the volume of other organics, their source, consistency, quality control assurance mechanisms, and a demonstration of operational capacity to properly handle them by the POTW.

Comment: MWRA asks if there will be standards used to review requests for additions of source separated organics to digesters at treatment facilities. They also ask if MassDEP will require licensing or documentation of the materials introduced – and about liability / or certification from haulers that their loads meet any requirement.

Response: MassDEP has not proposed specific standards for organic materials eligible to be added into a POTW digester at a wastewater treatment facility. Wastewater treatment plants

could develop their own criteria for adding materials to their digesters, as the facility will have accept, approve and keep records of any added materials. There is a similar responsibility in place now for wastewater facilities to control the addition of septage to a wastewater treatment facility. Wastewater treatment plants will continue to be responsible for meeting effluent limits in their discharge permits, and providing any and all treatment required.

At this time MassDEP does not intend to develop a program to license or certify organic material haulers. There is, however, a similar programmatic structure in place for septage haulers to control the addition of septage to a wastewater treatment facility that could be expanded to be used for this purpose in the future.

The introduction of any material into a digester will have to be approved by the facility, and the facility itself could develop such standards or certification requirements in local requirements or its agreements to accept materials.

Comment: MWRA asked a number of questions in its comments about continuing obligations under 314 CMR 12.00 – such as updating Operation & Maintenance manuals and submitting local sewer use regulations for approval.

Response: Any modification to a wastewater treatment facility requires a plan approval and modification of the facility Operation & Maintenance Manual. The proposed regulatory changes do not require that previously approved sewer use regulations be resubmitted for a new approval.

Appendix

Submitters of Comments on the Draft Organics Diversion Regulations

Comments on the public hearing draft were received from the following people or organizations:

AGreen Energy, LLC
Brent Baeslack, Don't Waste Mass.
Christopher J. Barnett, Lexington, MA
Boston Public Health Commission
George A Burnell, Selectman, Town of Lexington
Casella Waste Systems, Inc.
Clean Water Action
Coalition of Local Public Health
Conservation Law Foundation
E.L. Harvey & Sons, Inc.
Environmental Business Council
ESS Group, Environmental Consulting and Engineering Services
John Flynn, Lexington Board of Health
Franklin County Solid Waste Management District
Jo Hart, Worcester
Harvest Power, Inc.
L. Moreau, League of Women Voters
Massachusetts Department of Public Health
Massachusetts Department of Public Health, Bureau of Environmental Health
Massachusetts Department of Transportation, Rail & Transit Division
Massachusetts Environmental Health Association
Massachusetts Health Officers Association
MassRecycle
Massachusetts Water Resources Authority
Maureen Doyle, Southbridge, MA
Melissa Desautels, Belchertown
National Solid Waste Management Association, MA Chapter
New England Small Farm Institute
NEO Energy
North East Biosolids & Residuals Association
Kirstie Pecci, Residents for Alternative Trash Solutions
Pedal People
Lynne Pledger, Sierra Club and Clean Water Action
Sierra Club
Staci Ruben, ACE
SEMASS Partnership

Building Capacity for Managing Organic Materials: Response to Comments
November 23, 2012

Toxics Action Center

Town of Andover, Director of Public Health

Town of Halifax

Town of Lexington, Office of Community Development, Health Division

Waste Management of Massachusetts, Inc.

Zemel Consulting Group, Public Health Consulting Services